

JULY 11

Q3

Central Bank Quarterly Bulletin



Banc Ceannais na hÉireann
Central Bank of Ireland

Eurosystem

Contents

Section 1

Forecast Summary Table	6
Comment	7
The Domestic Economy	9
Box A: The Impact of the Car Scrappage Scheme on Retail Sales	
Box B: Relative Trends in Irish Services Producer Prices	
An Timpeallacht Gheilleagrach	33
Financing Developments in the Irish Economy	35
Box 1: Developments in Retail Interest Rate Margins	
Developments in the International and Euro Area Economy	53
Box 1: Recent Developments in Euro Area Housing Markets	
Box 2: A Study of Irish Trade with China	
Recent Economic Research Publications	68

Section 2

The Rise and Fall of Sectoral Net Wealth in Ireland	70
Mary Cussen and Gillian Phelan	
Using the Bank Lending Survey to Understand the Recent Disruption to Financial Markets: An Overview	83
Bernard Kennedy	
Meeting the Statistical Challenges of Financial Innovation: Introducing New Data on Securitisation	109
Brian Godfrey and Clive Jackson	

Section 3

Statistical Appendix

Notes

1. The permission of the Government has been obtained for the use in this Bulletin of certain material compiled by the Central Statistics Office and Government Departments. The Bulletin also contains material which has been made available by the courtesy of licensed banks and other financial institutions.
2. Unless otherwise stated, statistics refer to the State, i.e., Ireland exclusive of Northern Ireland.
3. In some cases, owing to the rounding of figures, components do not add to the totals shown.
4. The method of seasonal adjustment used in the Bank is that of the US Bureau of the Census X-11 variant.
5. Annual rates of change are annual extrapolations of specific period-to-period percentage changes.
6. The following symbols are used:

e estimated	n.a. not available
p provisional	. . no figure to be expected
r revised	– nil or negligible
q quarter	f forecast
7. As far as possible, data available at end-June 2011 are included in the Statistical Appendix (Section 3).
8. Updates of selected Tables from the Statistical Appendix, concerning monetary and financial market developments, are provided in *Money and Banking Statistics*. Data on euro exchange rates are available on our website at www.centralbank.ie and by telephone at 353 1 2246380.

Designed by: Clever Cat, Pembroke House, 28-32 Upper Pembroke Street, Dublin 2

Cover Photograph: Stuart Bradfield

Enquiries relating to this Bulletin should be addressed to:

Central Bank of Ireland (Publications),
P.O. Box No. 559, Dame Street, Dublin 2.
Phone 353 1 2246278; Fax 6716561,
www.centralbank.ie
Publications@centralbank.ie

ISSN 0332-2645

Forecast Summary Table

	2008	2009	2010	2011 ^f	2012 ^f
Real Economic Activity					
(% change)					
Personal consumer expenditure	-1.1	-6.9	-0.8	-2.4	-0.6
Public consumption	0.5	-4.5	-3.8	-3.8	-3.6
Gross fixed capital formation	-10.2	-28.7	-24.9	-9.9	-0.9
<i>of which:</i> Building and construction	-8.3	-31.1	-30.3	-19.6	-6.4
Machinery and equipment	-10.8	-19.7	-14.5	4.0	5.0
Exports of goods and services	-1.0	-4.2	6.3	6.4	6.2
Imports of goods and services	-2.9	-9.3	2.8	3.6	4.4
Gross Domestic Product (GDP)	-3.0	-7.0	-0.4	0.8	2.1
Gross National Product (GNP)	-2.8	-9.8	0.3	-0.3	1.0
External Trade and Payments					
Balance-of-Payments Current Account (€ million)	-10,169	-4,697	761	1,883	4,555
Current Account (% of GNP)	-6.6	-3.6	0.6	1.5	3.6
Prices, Costs and Competitiveness					
(% change)					
Harmonised Index of Consumer Prices (HICP)	3.1	-1.7	-1.6	1.0	0.6
<i>of which:</i> Goods	2.9	-4.1	-2.4	1.2	0.5
Services	3.4	1.2	-0.7	0.7	0.7
HICP excluding energy	2.6	-1.0	-2.7	-0.1	0.2
Consumer Price Index (CPI)	4.1	-4.5	-1.0	2.0	1.0
Nominal Harmonised Competitiveness Indicator (Nominal HCI) ^a	4.5	1.0	-4.2	0.2	n.a.
Compensation per non-agricultural employee	5.6	-1.5	-3.3	-0.3	0.2
Labour Market					
(% change year-on-year)					
Total employment	-1.1	-8.1	-4.2	-1.7	0.2
Labour force	0.8	-2.4	-2.2	-1.0	-0.1
Unemployment rate (ILO)	6.3	11.8	13.6	14.2	13.9
Technical Assumptions^b					
(Annual average)					
EUR/USD exchange rate	1.47	1.39	1.33	1.42	1.44
EUR/GBP exchange rate	0.80	0.89	0.86	0.88	0.90
Oil price (\$ per barrel)	97.7	61.9	79.6	110.7	109.9
Interbank market – Euribor ^c (3-month fixed)	4.63	1.22	0.81	1.51	2.13

^a Based upon the annual change in the average nominal HCI for the first six months of 2011.

^b The technical assumption made is that exchange rates remain unchanged at their average levels in late-June and early-July. Oil prices and interest rates are assumed to move in line with the futures market.

^c Euribor is the rate at which euro interbank term deposits are offered by one prime bank to another, within the euro area. Daily data from 30 December 1998 are available from www.euribor.org.

Comment

Against the background of what is, at the time of writing, still an unresolved euro area crisis of the public finances and of Sovereign debt markets, the gradual consolidation of the Irish public finances and the accelerated steps in recapitalisation and reorganisation of the banking system have not prevented a remarkable widening of spreads on Irish Government debt. The step by step return to a sustainable financial and fiscal situation (as confirmed by the EU Commission, ECB and IMF), is nevertheless building the foundations indispensable for future growth.

Taking a broad view, the period since the last Quarterly Bulletin has not been marked by any further significant overall weakening of the Irish macroeconomic indicators, while revised official data for 2010 indicates a somewhat better outturn for the main GDP and GNP aggregates than that originally suggested by the provisional data.

The prospect for a broad-based recovery continues to depend significantly on external conditions. There have been contrasting developments in the Irish economy's external environment over recent months. The recovery in global economic activity is continuing at a reasonably strong, if somewhat uneven, pace. There have been signs of some slowdown in the US recovery, growth in the euro area has also eased, although this was partly in line with expectations, and the Japanese economy has been affected by the recent earthquake and tsunami. These factors have led to some moderation in the growth in the advanced economies but this is expected to be temporary. The developing economies, on the other hand, continue to grow very strongly. As a result, any recent revisions to projections of global output growth and world trade volumes by international agencies have been modest. At the same time, tensions have increased in euro area financial markets, reflecting not only the high levels of indebtedness of some peripheral economies, including Ireland, but even more so, concerns about how these difficulties will be resolved by euro area governments and the likely consequences of different scenarios in this regard. Other risks still remain, including those related to overheating in developing economies,

commodity price movements, re-emerging global imbalances and sovereign debt concerns more generally.

Given these external developments and, indeed, the extent of fiscal adjustment in the domestic economy, the likely outturn for growth in the Irish economy this year is subject to more uncertainty than usual. There seems to be no reason, however, at this point, to significantly alter the Bank's previous projections for the main economic aggregates. As a result, GDP is still expected to grow by about 0.8 per cent this year although GNP may decline slightly, perhaps by about 0.3 per cent. This is likely to be followed by somewhat stronger growth in 2012 when an expansion in GDP of about 2.1 per cent and in GNP of about 1 per cent is anticipated. The broad narrative behind these figures remains unchanged. Exports continue to grow while domestic demand remains weak, although the contraction in the latter is gradually easing. Reflecting the modest rate of output growth and the fact that it is driven by sectors that are not labour intensive, employment has yet to stabilise. It will be the end of this year or, more likely, next year before any employment growth starts to emerge. Unemployment may already have peaked but this largely reflects a pick-up in net outward migration, combined with lower participation. Inflationary pressures remain subdued but inflation has turned positive, as external price increases feed through to the domestic prices. The external current account has also swung into a modest surplus, slightly earlier than projected.

Significant progress has been made on the main challenges facing the economy. Fiscal developments up to the middle of the year have been broadly in line with expectations, as the impact of changes made in the last Budget begin to have their full effect. The Government has also confirmed its commitment to making the necessary adjustments in Budget 2012 to keep the overall fiscal correction on track. Ideally, the greater the level of detail that can be decided upon and announced in terms of the overall fiscal adjustment package, the better. This would help to remove uncertainty for domestic households and firms and contribute to confidence in the adjustment process overall. It could also help to limit the effects of higher precautionary savings by clarifying the impact of the overall fiscal adjustment package on households and firms, although the difficulties of identifying and agreeing the detailed adjustments cannot be underestimated. The Irish Fiscal Advisory Council, newly established by the Government, should help ensure that the planned fiscal path is sustainable.

There has also been considerable progress on the re-capitalisation and restructuring of the banking sector. Banks have been engaged in capital liability management exercises with a view to limiting the amount of public funds that will have to be committed to ensure that all institutions meet the capital requirements set out by the Bank following the 2011 Prudential Capital Adequacy Review results published at the end of March. They have also been engaging in a process of de-leveraging whereby they are progressively, although at a measured pace, divesting themselves of non-core assets over time, in order to bring down their loan-to-deposit ratios and reduce their dependence on central bank funding. This process will take some time and will be assessed at intervals under the EU/IMF Programme. Restructuring has also been proceeding with the incorporation of INBS into Anglo Irish Bank. The resulting entity is to be renamed the Irish Bank Resolution Corporation, whose primary role will be the recovery of the maximum value possible from the assets of Anglo Irish Bank and INBS over

time for the taxpayer. EBS has also been merged with AIB to form one of the two 'pillar banks' of the system going forward along with Bank of Ireland.

On the competitiveness front, further gains have been made, reflecting the fact that wage levels are set to remain broadly unchanged over this year and next. This compares with a situation of ongoing wage increases in almost all of the country's trading partners. This, combined with a still favourable productivity performance, is allowing the country to recover more of the competitiveness lost over the previous years of the boom. As noted in previous Bulletins, however, further progress needs to be made. Two separate points are worth noting here. First, the technical point that the overall indicators of improvements in unit labour costs may be distorted by the sharp contraction of low-productivity sectors and the expansion of more high-productivity ones. This shift in activity is a positive one but it means that the competitiveness improvement within most individual sectors is less than that indicated by the overall measure. Second, there is still a need for further structural reform aimed at enhancing productivity growth, by introducing more competition into certain private services sectors and by reforming the public sector to increase its efficiency. These measures have the potential to boost growth in the economy over the medium-term and to increase its resilience to external shocks. They will also help, along with the other measures already outlined, to move the economy onto a path which will take it out of its currently over-indebted situation as rapidly as possible.

The Domestic Economy

Overview

- According to recently released annual National Accounts data, GDP declined by 0.4 per cent in 2010, while GNP increased by 0.3 per cent. A modest volume increase in GDP of about 0.8 per cent is projected for this year, with GNP declining marginally by about 0.3 per cent. The divergent trends in real GDP and GNP reflect volatility in net factor income flows in recent quarters. The outflow, which accounts for the difference between the level of GDP and GNP, recorded an unexpected decline last year that is likely to be reversed in 2011.
- The return to positive output growth this year is being driven by a robust performance in exports while domestic demand continues to decline, albeit at a moderating rate. A modest pick-up in growth is in prospect for next year, with GDP and GNP increasing by 2.1 per cent and 1 per cent, respectively, reflecting a continued positive contribution from export growth and the prospect of a gradual stabilisation in domestic demand.
- The projected contraction in domestic demand this year reflects weakness across most components of expenditure. Construction investment remains on a downward trend with housing completions likely to bottom-out at about 10,000 units this year and non-housing construction adversely impacted by cuts in public investment and the continued weakness in private demand. Consumer expenditure is also expected to decline this year reflecting real declines in disposable incomes and fragile consumer confidence. Finally, public consumption is contracting in line with significant reductions in public expenditure.
- The strong momentum in exports during last year was sustained in the first quarter of 2011, when exports increased at an annual rate of 7 per cent. Reflecting some moderation in external demand during the remainder of the year and in 2012, export volumes are forecast to increase by 6.4 per cent this year and by 6.2 per cent in 2012.
- The current account recorded a surplus of 0.6 per cent of GNP last year and, buoyed by continued strength in exports, is expected to increase to about 1.5 per cent of GNP this year, notwithstanding an adverse terms of trade effect arising from increases in energy and other commodity prices. A further increase in the current account surplus to about 3.6 per cent of GNP is projected for 2012.
- The composition of output growth this year, in particular the continued contraction in domestic demand, is not conducive to employment growth. Labour market conditions remain weak with the prospect of only modest improvement in 2012. Employment is expected to continue to contract in 2011 by about 1.7 per cent. Looking ahead to 2012, a marginal increase in employment is envisaged. A decline in the labour force of about 1 per cent this year will mitigate the impact of a decline in employment on unemployment which is projected to increase to an average of 14.2 per cent this year before declining somewhat to about 13.9 per cent in 2012.
- Taking account of a further deterioration in labour market conditions in 2011 and continued weakness in 2012, the prospects are for a continued decline in non-agricultural wages this year of about 0.3 per cent, followed by a marginal increase of about 0.2 per cent in 2012.
- Higher insurance premia and the pass-through of higher international oil prices exerted upward pressure on the annual inflation rate during the first half of this year. Continued weak consumer demand conditions and the reduction in VAT for mainly tourism related services may be largely offset by price rises for utilities during the remainder of the year. Accordingly, the annual HICP inflation rate is projected to average about 1 per cent this year. Meanwhile, CPI inflation is likely to be significantly higher than HICP inflation for 2011, reflecting the impact of mortgage interest rate increases. Challenging labour

market conditions and further fiscal consolidation will constrain demand and the pricing power of firms during 2012. Accordingly, the annual HICP inflation rate is projected to average about 0.6 per cent next year.

- The overall competitiveness position of the Irish economy is continuing to improve reflecting relatively weak price and cost developments, notably in services producer prices, and strong productivity growth. Some caveats are warranted however. In particular, the improvement in productivity growth is overstated due to compositional effects. In addition, there were some adverse exchange rate movements in the second quarter of this year, with the depreciation in sterling against the euro applying pressure on indigenous exporters. Nonetheless, recent competitiveness developments remain broadly favourable.

Demand

Consumer Spending

The revised National Accounts indicate that real personal consumption declined by 0.8 per cent during last year. Consumers continued to pay down debt and exercise caution in the face of weak labour market conditions and uncertainty surrounding real income growth. Although there was a modest recovery in sentiment during the first quarter of this year from a low point in December, real personal consumption fell by 1.9 per cent on a seasonally adjusted basis in the first quarter of this year, according to official preliminary estimates. Looking through the volatility associated with unusually severe weather in December, a combination of factors likely weighed heavily on the purchasing decisions of consumers, including the impact of the large fiscal consolidation on disposable incomes and the pass-through of higher oil prices. It is also likely that the motor trades component is influencing to a significant degree the profile of retail sales and personal consumption of goods (see Box A, pp.12).

While consumer sentiment recovered further in the second quarter, consumers remain cautious, as evidenced in the seasonally adjusted cumulative decline of 1.8 per cent in core retail sales during April and May. Also, increases in ECB base rates are likely significantly influencing households' behaviour, reflecting high levels of personal indebtedness. Some frontloading of the purchases of motor cars before the expiry of the car scrappage scheme in June may also see downward pressure on motor trades during the second half of the year. Together, these developments point to an annual average decline of 2.4 per cent in personal consumption for this year. This represents a slight downward revision since the last Bulletin, which mainly reflects a somewhat stronger than anticipated decline in the first quarter, particularly for services consumption.

Looking ahead to next year, personal consumption is expected to decline by 0.6 per cent, with real disposable incomes coming under more pressure than was previously anticipated. In line with some stabilisation in the labour market, a very modest decline in the precautionary savings has been factored in, but the personal savings rate will remain elevated by historical standards as households continue to rebuild their financial position.

Chart 1: Index of Volume of Retail Sales



Source: CSO.

Table 1: Expenditure on Gross National Product 2010, 2011^f and 2012^f

€ million	2010	% change in		2011 ^f	% change in		2012 ^f
		volume	price		volume	price	
Personal consumption	82592	-2.4	1.0	81350	-0.6	0.5	81250
Public consumption	26222	-3.8	0.0	25222	-3.6	-0.1	24298
Gross domestic fixed capital formation	18074	-9.9	-2.2	15919	-0.9	-0.7	15676
<i>Building and construction</i>	10672	-19.6	-4.5	8198	-6.4	-1.6	7553
<i>Machinery and equipment</i>	7402	4.0	0.3	7721	5.0	0.2	8123
Value of physical changes in stocks	-852			-300			0
Statistical discrepancy	184			184			184
Gross Domestic Expenditure	126220	-3.4	0.3	122375	-1.0	0.2	121408
Exports of goods & services	157673	6.4	1.8	170827	6.2	0.8	182874
Final Demand	283893	2.1	1.2	293202	3.2	0.5	304282
Imports of goods & services	-127901	3.6	3.4	-137113	4.4	0.8	-144357
Gross Domestic Product	155992	0.8	-0.7	156089	2.1	0.3	159925
Net factor income from rest of the world	-27786			-29936			-32204
Gross National Product	128206	-0.3	-1.3	126153	1.0	0.2	127721

Investment

Declining investment in the economy's fixed capital continued to detract from domestic demand in the opening quarter of 2011, albeit at a more moderate pace compared with the previous year, down 9.1 per cent in volume terms year-on-year according to the Quarterly National Accounts. The Production in Building and Construction Index points to a 23 per cent fall in overall building and construction activity for the quarter. Within this, investment in residential housing fell by 20.1 per cent year-on-year, while investment in non-residential or commercial investment fell by 12 per cent over the same period. The largest fall, however, came in civil engineering, down 41.4 per cent year-on-year in the first quarter, reflecting consolidation in Government capital expenditure this year. On a more positive note, investment in machinery and equipment, excluding the volatile aircraft component, increased by 2.1 per cent in the first quarter of the year.

For the remainder of this year, most of these trends are likely to persist but with residential and commercial investment bottoming-out by year end. Forward-looking indicators for the housing market suggest that residential

completions are unlikely to exceed 10,000 units both this year and next, a forecast unchanged since the last Bulletin. Following completions of approximately 14,600 last year and allowing for a further but less pronounced decline in repairs and improvements this year, housing investment is expected to contract by approximately 19 per cent in 2011 and remain flat in 2012. Demand in the housing market remains weak as tight credit, unfavourable employment conditions, the prospect of rising interest rates and concerns about further falls in house prices continue to shape expectations. The extent of the housing supply overhang, the subject of some uncertainty until the full Census results are published, is also likely to depress investment activity in this sector in the coming years.

Activity in non-residential construction is also set to impact negatively on domestic demand this year and next. While the fall in commercial property prices (see Property Prices section) is slowing, activity within all sectors remains weak, with significant overhangs in the retail, industrial and office markets persisting. There is likely to be a further increase in commercial properties brought to the market as NAMA

and borrowers unwind their positions. It is therefore unlikely that substantial investment will be undertaken in these sectors over the forecast horizon. Large negative impulses in civil-engineering, against a background of continued consolidation in public capital expenditure, point to further significant reductions in the volume of non-residential investment of about 20 per cent this year and 11 per cent in 2012. This is corroborated by the latest Ulster Bank Construction Purchasing Managers Index which suggests that while civil engineering continued to record the sharpest declines, commercial and housing activity weakened further. Overall, building and construction is forecast to fall by approximately 20 per cent this year and 6 per cent in 2012.

Machinery and equipment investment is forecast to grow by 4 and 5 per cent in 2011 and 2012, respectively – in line with an export led recovery. Overall investment is forecast to contract by approximately 10 per cent this year and by nearly 1 per cent in 2012. These forecasts are, however, subject to uncertainty given the dominant weight and variance of aircraft purchases in the machinery and equipment component and the uncertain

outlook for public investment expenditure in the context of ongoing fiscal consolidation over the forecast horizon.

Stock Changes

The rate of decline in stocks moderated significantly in 2010, resulting in a positive contribution to GDP growth of 0.8 per cent. Stocks are projected to contribute about 0.4 per cent to GDP growth in 2011 and about 0.2 per cent to growth in 2012, as the pace of de-stocking eases further.

Government Consumption

Annual National Accounts data show a decline in the volume of Government consumption of 3.8 per cent last year. On the basis of expenditure plans set out in the Budget and in the Programme for Government, the volume of Government consumption is projected to decline by 3.8 per cent this year and by 3.6 per cent in 2012.

Box A: The Impact of the Car Scrappage Scheme on Retail Sales

By Eddie Casey and Derry O'Brien¹

The Government car scrappage scheme was introduced in Budget 2009 for a one-year period whereby consumers could trade in a car of ten years or older and receive a discount of up to €1,500 on a new low-emissions car. The scheme was extended in Budget 2010 for a further six months, with a reduced discount of €1,250, and expired on June 30th this year. In this Box, we focus on the impact of the car scrappage scheme on the profile of Irish retail sales in order to better understand recent developments in retail sales and the goods side of the personal consumption component of GDP, as well as to aid in forecasting over the coming quarters. Such schemes tend to boost short-term demand for cars and, in particular, consumers often frontload purchases just before the expiry of the schemes. Car scrappage schemes have been introduced in other EU countries to cushion the impact of the recent sharp downturn on their domestic car production industry. The impact of these schemes on the countries' respective new car sales is discussed later in the Box. The merits of such schemes will not be assessed here but have been discussed elsewhere².

The numbers of new cars purchased under the scheme relative to the total numbers of new cars sold is illustrated in Chart 1. While the proportion of cars bought under the scheme is sometimes relatively small, for example at 12.2 per cent in the second quarter of last year, the impact in terms of the contribution to the year-on-year percentage change in overall car sales may still be quite significant in certain quarters.

¹ Economic Analysis and Research Division.

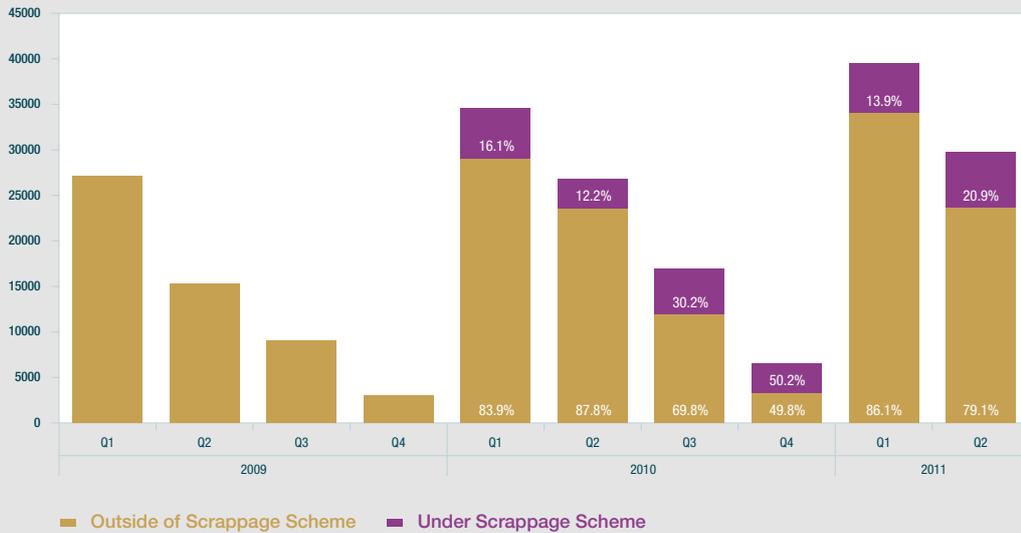
² For example, see ECB Monthly Bulletin October 2009 Box 4.

Box A: The Impact of the Car Scrappage Scheme on Retail Sales

By Eddie Casey and Derry O'Brien¹

It is noteworthy that the proportion of new cars bought under the scheme rose to over 50 per cent in the final quarter of last year. There was some uncertainty as to whether the scheme would be extended and it is likely that there was some frontloading of purchases before the initial phase of the scheme expired. The high proportion of cars purchased under the scheme during the final quarter of 2010 can also be explained by the fact that few new cars are normally purchased at that time of the year.

Chart 1: Number of New Private Cars Licensed



Source: CSO, Revenue.

The retail sales series are fixed weight Laspeyres indices and are constructed using seasonal type base weights to take into account that expenditure on new cars, in particular, tends to be concentrated in the early months of the year. The CSO updates the motor trades value weights using data on the responses for total turnover from a (matched) sample of garages. As such, a number of assumptions need to be made in order to arrive at an estimate of the contribution of car scrappage sales to the profile of the year-on-year percentage changes in retail sales. The value series for new cars sold is based on the numbers of new cars sold, which does not make allowances for changes in quality, and the consumer price sub-index for new cars sold. This new-cars-sold value index is used along with the official series on total motor trades to derive a value series for non-new car sales. 'Seasonal' base weights relating to the breakdown of new and second-hand cars sales for each month are estimated based on car licensing data for new versus imported second-hand car sales. It should be emphasised that the estimates are crude and should be treated with caution. The purpose of the exercise is to give some sense of the potential scale of the impact of the car scrappage scheme on the profile of retail sales. It is important to note that some new cars bought under the car scrappage scheme may have been bought in any case or that consumers may have purchased second-hand cars instead. In this sense, the estimate is in gross terms and is likely to represent an upper-bound on the impact of the scheme on retail sales. Also, it is worth keeping in mind that purchases of new cars under the scheme may have dampened purchases of other categories of retail sales given the impact on households' budgets and on relative prices. Furthermore, garages under dealers often introduced additional incentives linked to the government scrappage scheme, which boosted sales under the official scrappage scheme.

Box A: The Impact of the Car Scrappage Scheme on Retail Sales

By Eddie Casey and Derry O'Brien¹

The contribution of the cars purchased under the scheme to the year-on-year percentage change in overall retail sales is clearly significant during most of the scheme, as can be observed in Chart 2. The weight of motor trades in retail sales is highest in the first quarter at 32.5 per cent and falls during the year to 13.4 per cent in the final quarter. This explains why the contribution of the car scrappage sales is not higher in the final quarter of 2010 despite the fact that such a large proportion of new car sales were purchased under the car scrappage scheme. It is also worth noting that when excluding new cars bought under the scrappage scheme, new car sales rose sharply in the first quarter of this year relative to the same period last year, a very tentative sign that there may be some recovery in the market more generally. The contribution of the scrappage scheme picked up again in the second quarter of this year as frontloading of purchases of new cars intensified before the expiry of the scheme at the end of June. As the estimates for Q2 are based on April and May data only (the retail sales for June are not available yet), the impact of the scheme on Q2 is likely understated.

Chart 2: Impact of Car Scrappage Scheme on Irish Retail Sales, contributions to year-on-year change



Source: CSO, Revenue.

There is some international evidence to suggest that the expiry of the scrappage scheme in Ireland may skew motor trades going forward. Chart 3 presents the total number of new registrations of passenger cars in several EU countries during the months before and after the expiry of their respective scrappage schemes and compares these to the number of registrations in the previous year.³

³ The expiry of the scrappage schemes analysed above varies. For Austria, the scheme ran from April '09 to July '09; UK May '09 to March '10; Germany, Jan '09 to Dec '09; Italy, Feb '09 to Mar '10 and the Netherlands, May '09 to May '10. France's scheme, introduced in Jan'09, is included above, even though it has not yet been entirely phased out. This is due to the fact that much of the same purchasing behaviour shown elsewhere was exhibited in the French car market when stimulus incentives were reduced by 30 per cent in Jan '10. For the purposes of this study, this date is, therefore, treated as the date of expiry.

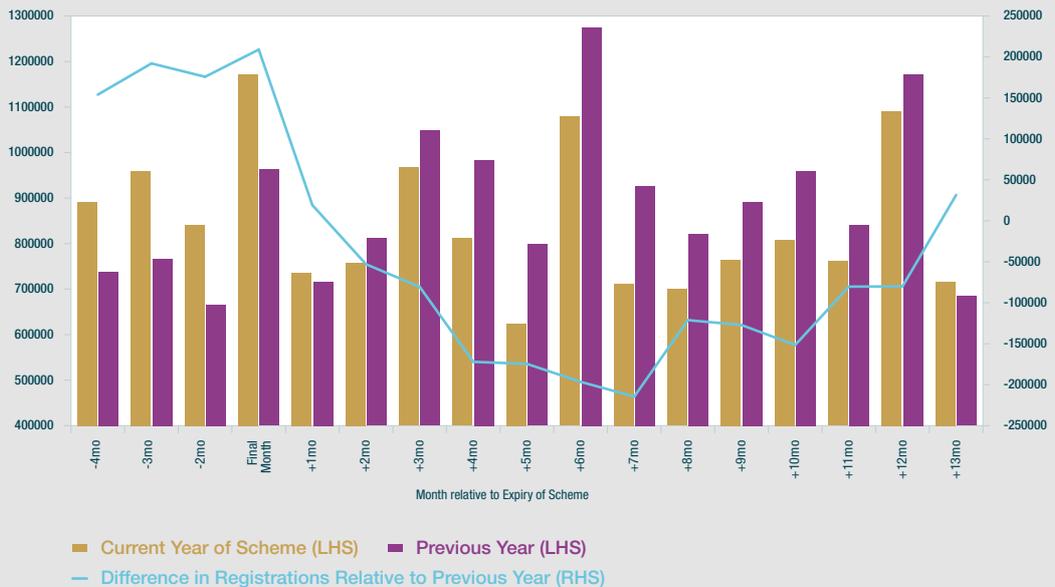
Box A: The Impact of the Car Scrappage Scheme on Retail Sales

By Eddie Casey and Derry O'Brien¹

The chart illustrates that, as the final month of the respective schemes approaches, new car registrations remain considerably above their corresponding figures for the same month of the previous year. In contrast, the months subsequent to the expiry of the schemes demonstrate a clear reversal, with sales lower relative to the corresponding months of the previous year. Similarly, the annual difference in new car registrations (as portrayed on the secondary axis) swiftly turns negative once the scheme ends, remaining below the previous year's levels for a full calendar year.

Interestingly, the annual decline in car registrations peaks seven months after the scheme expires (down 214,481 cars or 23.1 per cent year-on-year). The annual difference in the number of new car registrations, unsurprisingly, turns positive thirteen months after the expiry of the scheme as the base period (i.e. one month after expiry of the scheme) represents the period when the unwinding effect would be at its strongest. Notwithstanding this feature, the convergence is still quite prominent, with the decline in registrations falling to 6.8 per cent twelve months after expiry. Given that scrappage schemes typically inflate motor trades more prominently towards the end of the scheme, it would be reasonable to assume that the annual difference in registrations would become more pronounced in the period approaching twelve months after expiry. The evidence, however, points to a convergence in registrations during this latter phase suggesting that the unwinding period, during which post-scrappage scheme motor trades remain artificially depressed, may last considerably less than one year. Judging from the European experience, Irish sales of motors are likely to have been temporarily boosted by the oncoming expiry of the scheme, with the result that downward pressure on sales may also persist into the early months of next year before any unwinding effect dissipates.⁴

Chart 3: Number of New Passenger Car Registrations in Six EU Countries with Scrappage Schemes – Before and After Schemes Expire



Source: ACEA and Central Bank of Ireland calculations.

⁴ Two caveats remain: Firstly, the convergence over time experienced in other countries may well be related to a recovery in the business cycle; a factor which is typically internalised in the design of any scrappage-scheme in order to smooth consumption. Secondly, sales in Europe may not be concentrated in the final stages of the scheme as much as in Ireland due to the absence of yearly registration plates in European countries. This may understate the annual difference that could be expected in the Irish case approaching one year after expiry.

External Demand and the Balance of Payments

Merchandise Trade

The buoyancy of merchandise exports continued in the first quarter of 2011, with a volume increase of 6.2 per cent in annual terms. The CSO's External Trade Statistics, which provide some insight into the sectoral profile of the first quarter outturn, suggest that its strength may be largely attributed to the broad chemicals sector as it accounted for in excess of 90 per cent of the year-on-year increase in the value of merchandise exports. Within the chemicals sector, the performance of both pharmaceuticals and organic chemicals was noteworthy, with increases of 18.2 per cent and 15.1 per cent, respectively, in value terms over the same period. The contribution from the more traditional food and beverage sector proved robust annually in the first quarter of 2011 and was broadly in line with that of the previous quarter. Higher frequency external trade indicators are suggestive of some softening in the second quarter of 2011. While continuing to exceed the expansion/contraction threshold of 50, the new export orders index of the Manufacturing Purchasing Managers' Index (PMI) dropped back sharply in June to 51.5.

The outlook for 2011 as a whole remains positive, with external demand set to be supportive of merchandise export activity, albeit expanding at a reduced pace to that of 2010. In addition to the developments in external demand, the outlook for merchandise exports also depends upon the market share of world exports that Irish exporters can capture. The pace of recovery across regions is expected to be somewhat uneven, with a weaker expansion in prospect for some of Ireland's main trading partners such as the US and the UK, particularly in comparison to that of the emerging economies (see an analysis of Irish trade with China in Box 2 in the chapter on Developments in the International and Euro Area Economy). As a consequence, some modest loss in Ireland's overall external market share is expected to arise. The continued

improvement in the competitiveness of Irish exports due to the lowering of the cost base means that such losses in market share seem set to be contained. Reflecting such a combination of factors, merchandise exports are projected to increase by 4.6 per cent in 2011. Sustained by continued growth in external demand together with further competitiveness gains, merchandise exports are expected to remain strong in 2012, with growth in the region of 4.4 per cent.

Merchandise import growth was broadly flat year-on-year in the first quarter of 2011, with an increase of 0.3 per cent in volume terms. As regards 2011 as a whole, the persistence of weak domestic demand conditions throughout the projection period seems set to weigh somewhat upon merchandise import activity. Nevertheless, export-induced demand for imports is likely to support merchandise import flows given the high import-intensity of Irish merchandise export activity. Taking such developments into consideration, an increase in merchandise imports of around 1.3 per cent is projected for 2011. As the pace of decline in domestic demand moderates, merchandise imports are expected to pick up further in 2012, with an estimated increase in the region of 1.9 per cent.

Chart 2: Volume of Exports



Source: CSO Quarterly National Accounts.

Table 2: Merchandise Trade (Adjusted) 2010, 2011^f and 2012^f

€ millions	2010	% change in		2011 ^f	% change in		2012 ^f
		volume	price		volume	price	
<i>Merchandise Exports</i>	82944	4.6	0.8	87455	4.4	0.5	91715
<i>Merchandise Imports</i>	46448	1.3	7.0	-50333	1.9	0.5	-51528
Merchandise Trade Balance (Adjusted)	36496			37122			40187
(% of GNP)	28.5			29.4			31.5

Services, Factor Incomes and International Transfers

Similar to merchandise exports, the impressive performance of services exports continued in the first quarter of 2011, with a volume increase of 8 per cent in the first quarter of 2011. At a sectoral level, much of the strength in services exports activity during this period emanated from the computer services sector. Growth in computer services, the single largest services exports sector, remained exceptionally strong in the first quarter of 2011, with an increase of around 14 per cent in value terms year-on-year. The robust performance of business services served to compound the strength of computer services and when combined these two sectors accounted for in the region of 7.7 percentage points of the 9.5 per cent increase in the value of service exports annually in the first quarter. Initial indicators of services export performance for the second quarter of 2011 indicate that the expansion continued, albeit at a reduced pace to that of the previous quarter – the new export orders index of the Services PMI declined somewhat over the quarter relative to its peak of 56.6 in February. Nevertheless, the index remains well above the expansion/contraction threshold of 50. Some upward momentum in services export activity is envisaged during 2011 as the improved outlook for external demand seems set to be complemented by favourable competitiveness developments. Looking ahead to 2012, further strength in the performance of services exports is expected. It is noteworthy that the various measures recently introduced under the Jobs Initiative seem set to provide some support to tourism exports, which account for around 5 per cent of services exports and as a result the outlook for tourism exports has been revised upwards somewhat.

The volume of services imports remained strong in the first quarter of 2011, rising by 5.4 per cent annually. Such an outturn largely reflects the higher level of activity amongst foreign-owned multi-national companies located in Ireland, with business services increasing by 17.8 per cent in value terms. A further buoyant outturn for services imports is envisaged in 2011 and 2012. Growth in services exports is expected to exceed that of imports throughout the projection period and as a result, the services trade deficit is expected to narrow in both years.

Net factor income outflows are estimated to have been broadly unchanged annually in the first quarter, declining by 0.7 per cent year-on-year. Net factor income outflows are projected to rise for 2011 as a whole largely reflecting the quite strong performance of foreign-owned firms. A further increase in net factor outflows is expected in 2012. The international transfers component of the current account was negative during the year to the first quarter of 2011. The negative contribution arising from this component is expected to continue into 2011 and 2012. Reflecting the projected trends of its components, a current account surplus of around 1.5 per cent of GNP is anticipated in 2011. The current account surplus is expected to widen in 2012, with a surplus in the region of 3.6 per cent of GNP currently projected.

Table 3: Balance of Payments 2010, 2011^f and 2012^f

Current Account Items	2010	2011^f	2012^f
Merchandise Trade Balance	36496	37122	40187
Services	-7094	-4403	-2728
Net Factor Income from Rest of the World	-27416	-29566	-31834
Current International Transfers	-1222	-1270	-1070
Balance on Current Account	764	1883	4555
(% of GNP)	0.6	1.5	3.6

Supply

Industry and Services Output

The manufacturing sector overall grew by 2.6 per cent in annual terms over the year to May 2011, at a notably weaker pace than the 2010 full year growth outturn of 8.2 per cent. Strong full year growth in 2010, however, owed primarily to a pick up in the second half of the year. Having posted double digit growth in the closing quarter of 2010, the performance of the modern sector (which mainly encompasses hi-tech engineering and the broad chemicals sector) has begun to show signs of flattening out. The traditional sector, however, continues to improve, reflecting in particular significant buoyancy in food and beverage output.

Growth in the modern sector over the year-to-May was fairly modest by recent standards at 1.7 per cent, in contrast to expansion of 10.6 per cent in 2010. This is mainly accounted for by entrenched weakness in the electrical equipment sector and volatility in the broad chemicals sector, where a spike in output in the second quarter of last year has resulted in a significant base effect.

The traditional sector, which in the past had served to weigh down performance of manufacturing overall, continues to consolidate its position. Having posted consistently positive growth in each month since August of last year, it registered growth over the year-to-May 2011 of 2.7 per cent, with substantial positive contributions from food and beverages (where output is up 6.5 per cent in annual terms over the period).

Relative to the forecasts published at the time of the last Bulletin (April 2011) there have been no material revisions either overall or at component level to the industrial output outlook. Reflecting the continuing drag emanating from the electrical equipment sector and the apparent underlying moderation in the growth in the pharmaceutical output, prospects for the modern sector overall have, however, been revised downwards slightly for 2011.

Sustained buoyancy of agri-food exports over the opening two quarters of 2011 continues to auger well for the prospects of the traditional sector throughout both 2011 and beyond. The ongoing strength of external demand continues to support manufacturing output as the year progresses, with volumes expected to expand solidly as a result throughout both 2011 and 2012. Evidence from the PMI Manufacturing Index to end-June substantiates this view. Both the new orders and export orders components of the index registered consistent expansion in recent months, albeit with some slight slowdown evidenced in June, when the overall index contracted for the first time in nine months, although export orders continued to expand.

In relation to services, first quarter data from the Quarterly National Accounts reveals the output of other services (including rent) declined by 1.5 per cent in the first quarter of 2011 relative to the same period last year, marking its weakest deterioration since the first quarter of 2009. This outcome is not entirely consistent with recent evidence from the Services PMI index, which, although perceptibly stronger in the first quarter of 2011 relative to Q1 2010, has not (with the exception of February) registered evidence of strong expansion so far this year.

Table 4: Industry and Manufacturing Output, Annual Percentage Change

	Modern	Other	Manufacturing	Total Industry
2000	19.1	9.7	14.6	14.3
2001	16.3	5.5	11.4	11.0
2002	13.0	2.6	8.5	8.2
2003	7.0	4.0	5.6	5.7
2004	0.3	2.5	1.1	1.2
2005	5.2	2.3	4.1	4.0
2006	4.1	1.6	3.3	3.1
2007	6.9	3.0	5.6	5.2
2008	-0.8	-4.1	-2.6	-2.5
2009	2.2	-14.1	-4.1	-3.8
2010	10.6	1.8	8.2	7.4
2011 ^f	3.0	0.7	2.1	1.6
2012 ^f	3.1	0.2	2.7	1.8
Average 2000-2010	7.6	0.0	5.1	4.9

Note: Industrial production indices are compiled by the CSO and reflect output volumes excluding the effect of price changes. They are seasonally unadjusted. Wholesale Price Indices (WPIs) are used as deflators to strip out the price impact on output volumes. In March 2011, the CSO revised 2010 monthly indices to incorporate revised returns in respect of a number of subsectors and updated estimates of seasonal factors resulting in an improvement in the 2010 outturn.

Chart 3: Volume of Industrial Production



Source: CSO.

Agricultural Output

Last year proved to be a favourable one for the agricultural sector, with final estimates indicating a year-on-year rise in agricultural incomes amounting to 28 per cent, as measured by operating surplus. The scale of the annual improvement was overstated by a particularly weak performance in 2009, which saw incomes decline by 31 per cent in annual terms. Although nearly two thirds of the income declines in 2009 have since been reversed, incomes have not yet recovered to 2008 levels.

Increased volumes of domestic output, which rose by 2.4 per cent over the year, helped take advantage of favourable price developments amidst a backdrop of rising global demand and widespread supply shortages. As a result, the value of agricultural goods output rose by 12.2 per cent in 2010. Gains were especially concentrated in the dairy sector, which rose in value terms by 40 per cent over the same period, while the cereals sector also registered strongly, rising by 81.2 per cent. In addition, input costs moved favourably, rising by only 0.5 per cent in value terms, when compared to the previous year. The rebound in the performance of the Irish agricultural sector

Table 5: Summary of Agricultural Output and Income 2010, 2011^f, 2012^f

€ million	2010	% change in			2011 ^f	% change in			2012 ^f
	Value	Volume	Price		Value	Volume	Price		
Goods Output at Producer Prices ^a	5,309	6.1	1.4	4.6	5,633	0.1	1.0	-0.9	5,638
Intermediate Consumption	4,098	5.3	-0.8	6.1	4,315	-1.8	-0.1	-1.7	4,237
Net Subsidies plus Services Output less Expenses	1,684	0.6			1,694	0.0			1,694
Operating Surplus	2,010	6.1			2,132	3.6			2,209

a Including the value of stock changes.

during 2010 was reflected throughout the EU-27 countries, with operating surpluses averaging 18.1 per cent higher year-on-year across all members.

Turning to 2011, the most recent Quarterly National Accounts show a contraction in output in the broader agricultural, forestry and fishing sector (which captures a broader set of activities than those covered in Table 5), with volume decreasing by 2.1 per cent over the quarter following three consecutive increases in previous quarters. Relative to 2010, however, output remains strong, with the volume of output up 3.9 per cent over the same quarter of last year.

The outlook for the agricultural sector in 2011 is for a moderation in the rate of increase in incomes from last year. Output prices are expected to maintain their upward trajectory as signs of continued growth in global demand, particularly in emerging markets, lend support to farm-gate prices. The strength in the dairy sector, in particular, is expected to continue, with early signs pointing to positive output and price developments for this year. Recent rises in feed, fertilizer and energy costs, however, are expected to subdue margins across the agricultural sector in 2011 and going forward into 2012. As ever, downside risks remain, principally those relating to uncertainties concerning weather conditions, exchange rate movements and oil price developments.

The Labour Market

According to the Quarterly National Household Survey, a further deceleration in the rate of decline in employment was evident in the first quarter of 2011. In unadjusted terms, the number of persons employed fell by 2.9 per cent annually in the first quarter of 2011. This represents the smallest such decline since the third quarter of 2008. When seasonal factors are taken into account, employment fell by 0.5 per cent in the first quarter of 2011 following a 0.7 per cent decline in the previous quarter. Employment declined in eight of the fourteen economic sectors quarter-on-quarter in the first quarter, with a noticeably sharp 10.2 per cent decline in the accommodation and food services sector. The quarterly decline in employment during the first quarter solely related to full-time positions, with a fall of 1.2 per cent recorded quarter-on-quarter, which was partially offset by a 1.1 per cent increase in the number of part-time workers. It is noteworthy that part-time employment has increased consistently throughout the recession, as evidenced by the rise in the part-time employment share, from 18.1 per cent in the first quarter 2008 to 23.5 per cent in the corresponding quarter of 2011.

In unadjusted terms, the number of persons in the labour force fell by 1.5 per cent, year-on-year; identical to the annual decline in the previous quarter. Over 60 per cent of the reduction in the size of the labour force annually in the first quarter of 2011 is attributable to a decline in participation as the overall participation rate fell to 59.9 per cent. The participation rate has now fallen by almost

4 percentage points having peaked at 64.1 per cent in the final quarter of 2007. While labour force participation was the dominant source of the fall in labour supply, demographic factors, namely, the natural increase and net migration, also applied downward pressure. In the first quarter of 2011, the negative demographic contribution continued, accounting for around 12,000 of the overall labour force decline, which is suggestive of continuing net outward migration. Tentative estimates suggest that the number of non-Irish nationals in the labour force declined by 35,200 over the year to the first quarter of 2011, broadly in line with that of previous quarters.

When adjusted for seasonal factors, the unemployment rate declined from 14.8 per cent to 14 per cent, quarter-on-quarter, in the first quarter of 2011. This 0.8 percentage point decline served to partially reverse the 1.3 percentage point increase in the unemployment rate recorded on a seasonally adjusted basis in the final quarter of 2010 when the unemployment rate jumped from 13.5 per cent to 14.8 per cent. The sizable movements in the seasonally adjusted unemployment series of recent quarters have occurred despite somewhat limited change in the unadjusted figures and may partly reflect the difficulties associated with adjusting for seasonality during periods of volatility. A sharp deterioration in terms of the duration of unemployment was evident in the first quarter of 2011, with long-term unemployment accounting for 55.1 per cent of total unemployment in the first quarter of 2011; this compares with 40.9 per cent in the first quarter of 2010. High frequency labour market indicators are consistent with further labour market weakness in the second quarter of 2011 – the quarterly increase in the number of persons on the Live Register totalled to 2,700 persons when seasonally adjusted.

As regards the outlook for employment, weakness is expected to persist throughout 2011 and 2012. A further fall in employment is envisaged in 2011, with an estimated average annual decline of about 1.7 per cent. Such an outlook reflects both the export-oriented nature of activity which is generally held to be less labour-intensive together with further job

losses arising most notably in the financial, insurance & real estate services sector and the construction sector. Another factor set to place downward pressure on employment levels in 2011 and to a somewhat lesser extent in 2012 are public sector redundancies. Employment levels are expected to stabilise somewhat in 2012, with a modest increase in employment of around 0.2 per cent projected.

Weak labour demand conditions are expected to weigh upon the labour force in 2011. As a result, the size of the labour force is expected to continue to adjust downwards this year, with an average annual decline of around 1 per cent currently projected. As regards the composition of the labour force decline, it is envisaged that this decline will increasingly reflect demographic effects arising from net outward migration. Labour force levels are expected to be broadly flat in 2012, with a decline in the region of 0.1 per cent. Taking account of the outlook for employment and the labour force in 2011, a further rise in the unemployment rate is in prospect, with an average of approximately 14.2 per cent. A modest decline in the unemployment rate is expected in 2012 to around 13.9 per cent.

Pay

According to the 2010 National Income and Expenditure Accounts, compensation per non-agricultural employee declined by 3.3 per cent. This downward adjustment was predominantly driven by developments in public sector pay, namely, the public sector wage cut and the negative carryover arising from the pension levy introduced in April 2009.

Based on the CSO's quarterly earnings release for the first quarter of 2011, whole economy average weekly earnings declined by 1.3 per cent year-on-year. Such an outturn represents a considerable deceleration relative to the 2.5 per cent reduction in the year to the final quarter of 2010. It should, however, be noted that this falloff largely reflects the fact that the negative carryover arising from the public sector pay cut, which took effect in early 2010 no longer plays a role in year-on-year comparisons. A breakdown of the 1.3 per cent

Table 6: Employment and Unemployment 2010, 2011^f and 2012^e

	2010	2011 ^f	2012 ^e
Agriculture	85	84	85
Industry (including construction)	360	344	344
Services	1,403	1,389	1,393
Total Employment	1,848	1,817	1,821
Unemployment	291	301	295
Labour Force	2,140	2,118	2,116
Unemployment Rate (%)	13.6	14.2	13.9

Note: Figures may not sum due to rounding.

fall in whole economy average weekly earnings in the year to the first quarter of 2011 reveals that declines in both average weekly hours worked and hourly earnings of varying magnitude took effect during this period – the fall in average weekly hours worked of 1 per cent considerably outpaced the 0.1 per cent decline in average hourly earnings. At a sectoral level, average weekly earnings declined in the year to the first quarter of 2011 in ten of the thirteen economic sectors. The largest declines were recorded in the professional, scientific and technical sector and the arts, entertainment and recreation sector, with falls of 13.7 per cent and 11.9 per cent, respectively.

Given that the pay policy element of the “Public Service Agreement 2010-2014”, the public service pay and reform deal, states that there will be no further reductions in public sector pay between 2010 and 2014, the short-term outlook for wages seems set to be largely influenced by developments in the private sector. Taking this into consideration, wages are expected to remain under downward pressure in 2011 as cyclical factors, in particular the elevated unemployment rate seem set to dominate. Amid the projected gradual stabilisation in labour market conditions, the downward pressure on private sector wages seems set to wane during the course of 2012. As a result, wages are expected to return to growth, albeit modest, with compensation per non-agricultural employee projected to rise by 0.2 per cent. Combining the outlook for wages with that of employment suggests that a fall in the non-agricultural wage bill of 1.9 per cent is estimated for 2011 followed by a slight rise of 0.4 per cent in 2012.

Inflation

Despite some negative base effects, the annual HICP inflation rate rose from 0.2 per cent in January to 1.1 per cent in June. There were sharp month-on-month increases in the HICP recorded in the early part of this year although these have moderated in more recent months as the direct pass-through of higher international commodity prices has eased. Aside from the impact of higher international oil and food prices and looking through some volatility due to seasonal influences, the other main drivers of the large monthly increases were higher premia for medical, home and motor insurance. The headline Irish annual HICP inflation rate in June was still the lowest in the EU and significantly lower than the euro area average of 2.7 per cent. Due to stronger negative base effects associated with mortgage rate rises in March and April last year, the annual rate of the consumer price index (CPI) eased from 3.2 per cent in April this year to 2.7 per cent in June. The ECB base rate change announced in April was not passed on to standard variable rates by the majority of retail banks by early June.

Turning to the outlook for the second half of this year, continued weak consumer demand conditions and one-off factors such as the reduction in VAT for mainly tourism related services will push down the annual HICP inflation rate. In addition, weaker sterling vis-a-vis the euro may also give rise to lower euro import prices, mainly for food and clothing and footwear. However, significantly higher energy prices relative to the second half of last year will likely ensure that the annual rate of inflation remains in positive territory; oil futures contracts suggest that oil will average about

Table 7: Inflation Measures – Annual Averages, Per Cent

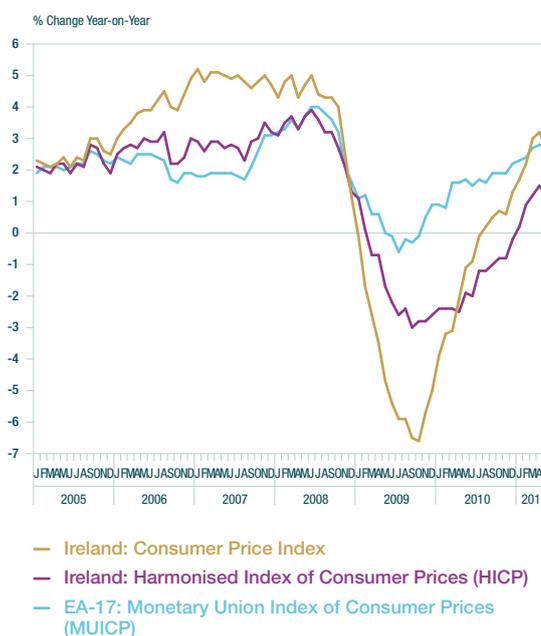
Measure	HICP	HICP excluding Energy	Services ^a	Goods ^a	CPI
2008	3.1	2.6	3.4	2.9	4.1
2009	-1.7	-1.0	1.2	-4.1	-4.5
2010	-1.6	-2.7	-0.7	-2.4	-1.0
2011 ^f	1.0	0.1	0.7	1.2	2.0
2012 ^f	0.6	0.2	0.7	0.5	1.5

^a Goods and services inflation refer to the HICP goods and services components.

110 dollars per barrel during the second half of this year, about 35 per cent higher than the same period the previous year. Also, factory gate prices for domestic food sales were up 5.3 per cent annually on average in the second quarter of this year, which may indicate some supply chain inflationary pressures, although food commodity prices have eased back in recent months. Core inflation is set to remain subdued, reflecting weak demand conditions, with the HICP excluding energy likely to average -0.1 per cent in 2011.

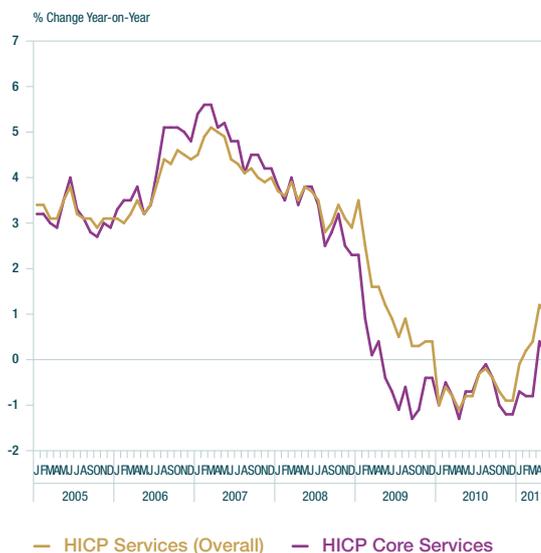
Challenging labour market conditions and further fiscal consolidation will constrain demand and the pricing power of firms during 2012. Accordingly, the annual HICP inflation rate is projected to average about 0.6 per cent next year. Domestic factors tend to dominate beyond a one-year horizon but there may be some positive carryover from possibly higher utility charges in the autumn. Although downward domestic pressures on inflation will begin to ease, the annual HICP inflation rate will likely be pushed down by strong negative base effects during the early part of next year before stabilising in the region of 0.7 per cent as the year progresses. Meanwhile, the annual CPI inflation rate will likely average 1.5 per cent next year as the mortgage interest component makes a significant positive contribution. This forecast is based on the purely technical assumption that retail banks pass through on a one-for-one basis the higher ECB policy rates currently expected by markets and that there are no margin increasing hikes in standard variable rates.

Chart 4: Consumer Prices



Source: CSO.

Chart 5: Services Sector Inflation



Note: Core Market Services equals HICP services excluding telecommunications, alcohol and administered services.

Source: CSO.

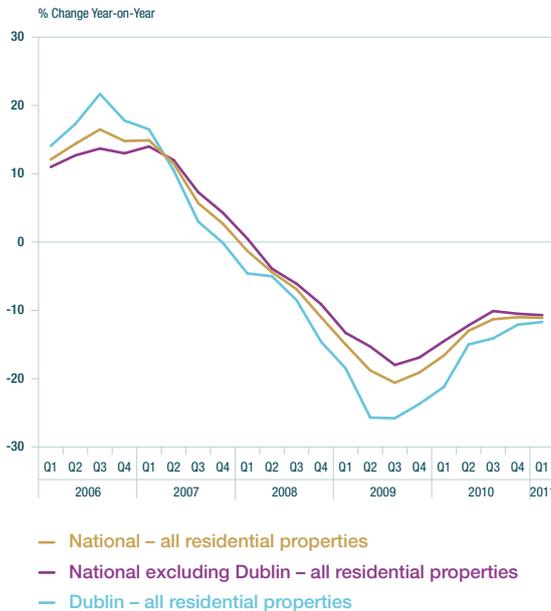
Property Prices

House prices continued their downward trend, falling by a cumulative 6.5 per cent in the first five months of this year, according to the CSO Residential Property Price Index. Nationally, house prices are almost 41 per cent lower than their peak in 2007. The new index indicates that house prices have fallen by a greater margin in Dublin compared to the rest of the country, but it is worth noting that prices in Dublin recorded larger increases during the boom. The Daft.ie, MyHome.ie and Sherry Fitzgerald house price estimates all point to similar quarter-on-quarter declines in Q2 of between 3 and 6 per cent, nationwide. Tight credit conditions, weak labour market developments, higher mortgage interest rates and a lack of mobility due to negative equity are likely to weigh on the market generally. Private sector rents stabilised during 2010 and the first five months of 2011, and declined by just 0.5 per cent year-on-year in May this year, according to the CSO's rental index. Overall, the housing market continues to be characterised by a persistently high degree of uncertainty. Also, increasing market segmentation suggests that some sectors are likely to stabilise and recover before others.

On the commercial front, the large falls in capital values witnessed over the last number of years seems to be moderating. Data from the Society of Chartered Surveyors/Investment Property Databank indicate that capital values in the retail, office and industrial sectors recorded quarter-on-quarter declines of 2.7 per cent, 2 per cent and 2.5 per cent, respectively, in the first quarter of 2011. However, the more recent Jones Lang LaSalle (JLL) index for the second quarter of 2011 indicates that the fall in the capital values of commercial property picked up to 5.7 per cent. Also, the JLL rental index recorded a broad based decline of 4.6 per cent over the same period, reflecting continuing pressure across markets with inducements being offered to prospective tenants weighing on income flows. As with residential property prices, capital values in prime locations are experiencing smaller declines. A significant overhang of commercial properties remains, however, with many tenants downsizing or renegotiating terms and

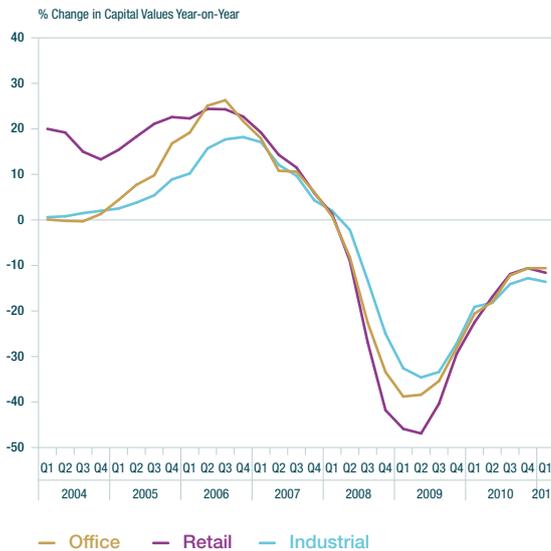
conditions as opposed to expansion. There is anecdotal evidence of increased interest from multinationals in some sectors.

Chart 6: National House Price Indices



Source: CSO.

Chart 7: SCS/IPD Irish Commercial Property Index

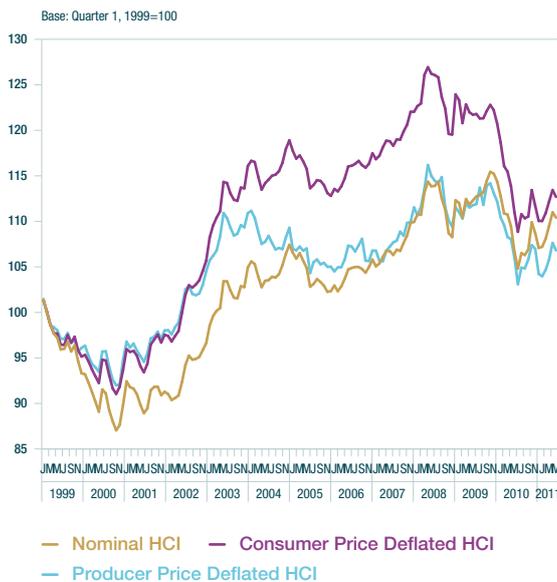


Source: SCS/IPD.

Competitiveness

The overall competitiveness position of the Irish economy is continuing to improve reflecting robust productivity growth and weak price developments. Some caveats are warranted however. In particular, there is a risk that the improvement in productivity growth could be overstated due to cyclical and compositional effects. In addition, the strengthening in the euro exchange rate against sterling in the second quarter of the year will put pressure on indigenous exporters. Despite this, the latest competitiveness developments remain favourable, which should provide a further boost to exporters in the year ahead.

Chart 8: Harmonised Competitiveness Indicators



Sources: Central Bank of Ireland and ECB.

Exchange Rate Developments

The euro exchange rate appreciated significantly in value against the dollar in the second quarter of 2011 by 5.2 per cent quarter-on-quarter. The euro sterling exchange rate also appreciated over the same period by 3.4 per cent. The latter will have had a disproportionate effect on indigenous Irish exporters, whose principal export market is the UK. The recent strengthening in the euro exchange rate is reflected in the most recent trends in the nominal Harmonised Competitiveness Indicator (HCI), which is a trade weighted exchange rate. The nominal HCI was up 2.6 per cent quarter-on-quarter in the three months to end-May, with the consumer price deflated HCI, up by a more moderate 2.2 per cent, reflecting weaker inflation in Ireland than in our main trading partners. Despite the recent strengthening in the euro exchange rate, the consumer price deflated HCI was still down on an annual basis, by 2.8 per cent in the year to end-May.

Chart 9: Hourly Earnings in Manufacturing (in Local Currency)



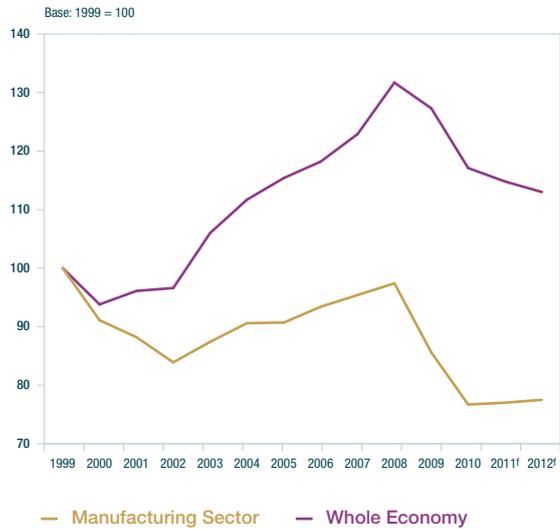
Source: Central Bank of Ireland calculations.

Productivity and Cost Competitiveness

The recently published National Income and Expenditure accounts for 2010 confirm the strong rebound in productivity growth last year. On a GDP basis, productivity grew by 3.9 per cent annually, the strongest rate of growth recorded since 2002, with productivity on a GNP basis higher still at 4.7 per cent, although this was helped by weaker net factor income outflows in 2010. The robust productivity performance reflected the growth in Ireland's high value added sectors, notably in modern manufacturing. At the same time, the sharp fall in the lower productivity sectors such as construction, contributed to the recovery in economy-wide productivity growth. These compositional and cyclical effects are set to continue this year, albeit to a lesser extent. In light of the overall economic and labour market outlook set out above, average annual productivity growth of 2.5 per cent is projected for 2011, with growth of 1.8 per cent in 2012.

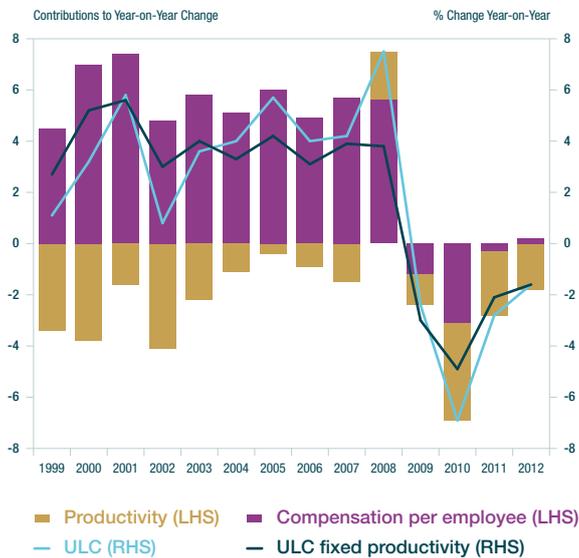
Unit labour costs in Ireland are expected to improve further over the projection period given the aforementioned outlook for productivity growth coupled with a marginal decline in compensation per employee. The latter, in particular, contrasts with projected increases in compensation per employee in Ireland's main trading partners. As mentioned in previous Bulletins however, unit labour cost indicators for Ireland need to be interpreted with caution due to compositional effects within the manufacturing sector, in particular, and the broader economy in general, which has the effect of inflating measures of economy wide productivity growth⁵. In Chart 11, economy wide unit labour costs are subdivided into its two components, namely productivity growth and the rate of change in nominal wages per employee. As can be seen, the turnaround in productivity growth was the main driving force behind the sharp improvement in unit labour costs in 2010. If productivity growth had been closer to its average over the past decade of 1.8 per cent per annum, then the improvement in unit labour costs on a GDP basis would have been less marked.

Chart 10: Irish Unit Wage Costs Relative to Main Trading Partners (in Common Currency)



Note: The series in the chart are influenced by compositional effects. For a more detailed discussion, see Box A: Compositional Effects in Recent Trends in Irish Unit Labour Costs, Quarterly Bulletin 2011 1.
Source: Central Bank of Ireland, European Central Bank and AMECO.

Chart 11: Unit Labour Costs by Component



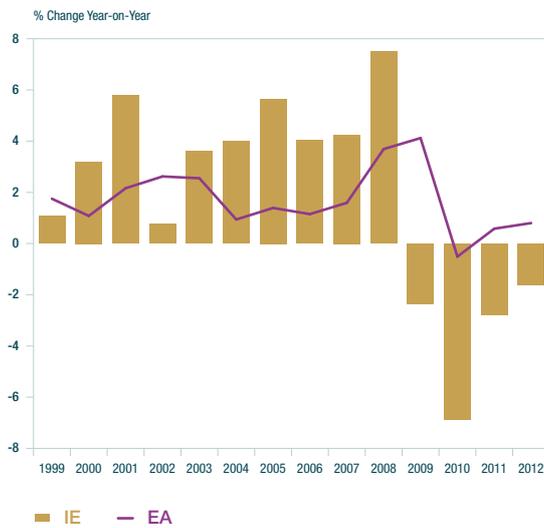
Source: Central Bank of Ireland calculations.

⁵ For a more detailed discussion on this issue, see Box A: Compositional Effects in Recent Trends in Irish Unit Labour Costs, Quarterly Bulletin 2011 1.

With the above mentioned caveats in mind, the outlook for unit labour costs in Ireland remains favourable relative to the euro area where unit labour costs are projected to increase by 1 per cent per annum on average in 2011 and 2012 according to the latest European Commission estimates. This compares to a 2.2 per cent projected annual decline in Irish unit labour costs over the same period.

In terms of the other competitiveness indicators, the new Services Producer Price Index shows continued downward pressure on services prices in Ireland. Services producer prices are discussed in more detail in Box B. In broader terms, the recently published report on the “Costs of Doing Business in Ireland” by the National Competitiveness Council provided a comprehensive overview of recent price and cost competitiveness developments in Ireland. While the Report acknowledged the improvement in competitiveness in a range of areas, it also noted that further structural reforms are necessary in certain more sheltered sectors of the economy.

Chart 12: Comparative Unit Labour Costs



Source: Central Bank of Ireland calculations.

Box B: Relative Trends in Irish Services Producer Prices *By Derry O'Brien and Diarmaid Smyth¹*

The CSO publishes a quarterly Services Producer Price Index (SPPI) that measures the prices paid by mainly domestic businesses for a range of services offered by domestic businesses². The headline index, along with indices for 12 sub-sectors, begins in the first quarter of 2006. Services producer prices are important indicators of a country's cost competitiveness as services produced by domestic businesses can impact directly on the cost base of other domestic businesses. Moreover, domestic service providers may also compete for business in international markets. In this Box, as part of the Bank's wider assessment of competitiveness developments in the Irish economy, recent trends in the Irish SPPI and certain sub-indices are briefly examined in an international context. For this purpose, a modified Irish SPPI and a comparable composite services producer price index for the euro area were constructed.

¹ Economic Analysis and Research Division.

² The SPPI is an experimental series and may be subject to refinement by the CSO. Prices are collected excluding VAT but inclusive of surcharges, such as fuel.

Box B: Relative Trends in Irish Services Producer Prices *By Derry O'Brien and Diarmaid Smyth¹*

The services producer price series for Ireland and the euro area were constructed using a re-scaled version of the set of expenditure base weights that form the basis of the official Irish SPPI. Applying the same weights to the same set of sub-sectors for both Ireland and the euro area indices should enhance comparability and facilitate the interpretation of relative movements in the indices. Due to limited data availability for the euro area, only seven sectors are covered, but these sectors account for almost 89 per cent of the total weight of the official Irish SPPI³. In certain instances, total services output price series are used as proxies for services producer price series. As can be observed in Chart A by the cumulative change relative to 2006, services producer prices in Ireland increased significantly during 2007 and early 2008. However, coinciding with the beginning of the sharp downturn in the domestic economy, services producer prices had peaked and were on a broadly downward trajectory until early 2010. By the first quarter of this year, Irish services prices were down marginally compared with 2006.

Relative to euro area prices, Irish services producer prices declined quite sharply from early 2008. Although Irish prices appear to have stabilised somewhat in recent quarters, prices in the euro area have continued to rise, albeit modestly. Overall, these trends point to some recovery in the competitiveness of the Irish economy, on the back of gains concentrated in 2008 and 2009. It is worth noting that although Irish services producer prices may now have returned to slightly below 2006 levels, services producer price levels pertaining in Ireland in 2006 may well have been relatively high compared to the euro area. The Irish economy recorded robust growth for much of the decade up to 2006, and this applied upward pressure on prices in the more sheltered services sectors of the economy and on prices more generally (as reflected in, for example, consumer services average price levels, which were 22.7 per cent higher than the corresponding euro area average prices in 2006).

Chart A: Irish and Euro Area Composite Services Producer Prices, cumulative change relative to 2006



Source: CSO, Eurostat and Central Bank of Ireland calculations.

³ The seven sectors covered and their rescaled weights are (1) computer programming and consultancy with a weight of 0.31; (2) legal, accounting, public relations and business management consultancy at 0.24; (3) employment and human resource activities at 0.05; (4) architecture, engineering and technical testing at 0.13; (5) advertising, media representation and market research at 0.05; (6) air transport at 0.14; and (7) freight and removal by road at 0.08. In this case of sector (1), an aggregate services producer price series based on data for 14 EU countries was used as a proxy for the euro area.

Box B: Relative Trends in Irish Services Producer Prices *By Derry O'Brien and Diarmaid Smyth¹*

Given the diverse nature of the sub-sectors within the SPPI, it is also useful to analyse trends at a more disaggregated level (see Chart B). For the euro area, all seven sub-sectors recorded significant price increases between 2006 and early 2011. In contrast, significant price declines were recorded in Ireland in the computer programming and consultancy services, employment activities, architecture and engineering as well as in advertising. However, there are some business services sectors in Ireland where producer prices are higher now than in 2006. Prices in the broad legal, accounting, public relations and management consultancy sector in Ireland are now over 2 per cent higher. While the corresponding prices in the euro area appear to have increased more rapidly, price developments at the aggregate level can mask strongly divergent trends within this broad sector. Indeed, in a recent Forfás report, trends in prices within this sector are examined using data from the CSO and it is noted that prices for legal services have stabilised at about 12 per cent higher than the average level in 2006 while prices for accountancy services have fallen significantly⁴. In the air transport sector, a large upward shift in oil prices may be an important explanatory factor in the substantial rise in prices in Ireland and the euro area, but it is noteworthy that prices for air transport services in Ireland increased more rapidly than in the euro area in recent years.

Chart B: Services Producer Prices, cumulative change 2006 to 2011Q1 (Selected Sectors)



Source: CSO, Eurostat and Central Bank of Ireland calculations.

⁴ Forfás National Competitiveness Council (2011), "Costs of Doing Business in Ireland 2011" pp.72-73.

The Public Finances

Exchequer Returns data

Exchequer Returns to end June indicate a deterioration in the Exchequer position year-on-year, with the €1.9bn worsening owing primarily to the €2.6bn increase in non-voted capital expenditure related to the first cash payment of promissory notes issued to Anglo/INBS in 2010. Abstracting from these

payments, the underlying deficit position has improved by some €1.2bn, illustrating that ongoing fiscal consolidation is continuing to deliver. Although net voted expenditure and Exchequer debt interest expenditure were up year-on-year (by 1.9 per cent and 36 per cent respectively), these were offset by strong tax revenue performance and higher non tax revenues (in turn due to bank guarantee fees).

Table 8: Mid-Year 2011 Exchequer Returns

	2010 Outturn €m	2010 End-June €m	2011 End-June €m	End-June % Annual Change
Current Expenditure				
– Voted ^a	40,517	19,655	20,547	4.5
– Non-Voted ^b	6,504	3,689	3,375	-8.5
Total	47,021	23,343	23,922	2.5
Current Revenue				
– Tax revenue	31,753	14,432	15,279	5.9
– Non-tax revenue ^c	2,689	866	1,465	69.2
Total	34,441	15,298	16,745	9.5
Current Budget Balance	-12,580	-8,045	-7,178	
Capital Budget Balance	-6,165	-842	-3,651	
Exchequer Balance	-18,745	-8,887	-10,828	
General Government Balance (% of GDP)^d	-32.0			
Underlying General Government Balance (% of GDP)	-11.9			
Source and Application of Funds				
Total Borrowing/Repayments	-12,618	-7,590	-16,653	
Total increase in Exchequer Deposits	-6,127	-1,298	5,825	
Exchequer Balance	-18,745	-8,887	-10,828	

^a Government current expenditure voted on by the Dáil in the areas of Social Welfare, Health, etc.

^b Debt servicing, judicial salaries and pensions and EU Budget contribution.

^c Central Bank surplus income, National Lottery surplus, interest and dividends.

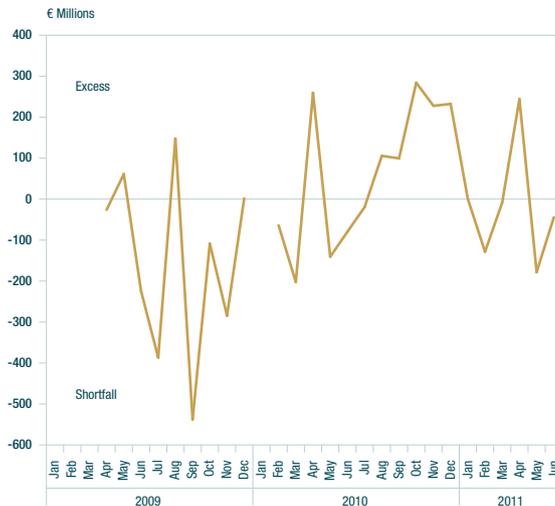
^d July Economic Bulletin estimate.

Tax revenues, at €15.3bn were up 5.9 per cent year-on-year, but 0.7 per cent behind their €15.4bn target for the year to June. Despite this strong performance, Exchequer revenues continue to be punctuated by persistent volatility. Whilst June receipts in isolation were 1.8 per cent behind target (notwithstanding the fact 7 per cent of the annual tax take was expected in June), those for April were ahead by 1.1 per cent. Revenue weakness in both May and June reflected poor corporation tax and VAT returns in particular, the only two tax heads now persistently performing below profile (by 7.6 per cent and 2.6 per cent, respectively). Alterations to certain company accounting calendars translated into particularly volatile corporation tax payment schedules this year, with early payments buoying up April returns. In contrast, some of the payments formerly anticipated in May are now expected in July. Income tax receipts are up 21.5 per cent in annual terms, and are ahead of targets for the year-to-date. This significant year-on-year improvement relates primarily to the impact of measures

enacted in Budget 2011 and the flattering impact of the Universal Social Charge (USC), which includes receipts from the health levy which were not formally accounted for on the revenue side of the account. USC receipts are now classified under the income tax head. The corollary of this reclassification is to put upward pressure on net voted current expenditure, which in spite of this pull remains 1.5 per cent below target for the year-to-end June. VAT receipts remain 2.6 per cent behind profile with this slippage having accelerated since end May. Poor cumulative performance is largely a reflection of weaknesses at the end of last year, given adverse weather conditions and especially weak consumer sentiment. VAT receipts for June alone also remained behind target. Although the 4.5 percentage point reduction in the VAT rate on tourism related activities announced in the May Jobs Initiative came into effect on July 1st, its impact will not be felt on the Exchequer until the end September returns are formalised.

On the spending side, net voted expenditure is up 1.9 per cent year-on-year, but remains 1.5 per cent below target. Whilst net voted current spending is up by proportionately more, it too remains some 1.1 per cent below profile, in spite of the deterioration in labour market conditions since the spending profiles were framed. Net voted capital expenditure (down 26.8 per cent year-on-year) remains 8.4 per cent below profile. This, however, is largely the product of timing issues, with targets likely to be met for the year as a whole as these factors unwind. Non-voted expenditure, of which the largest component relates to debt servicing costs, was down €314m year-on-year but reflects the flattering impact of the 2010 sinking fund payment (not yet replicated in 2011) and the use of some €600m offsetting Capital Services Redemption Account (CSRA) transfers. Excluding these impacts, total Exchequer debt servicing costs were up €800m or 36 per cent year-on-year.

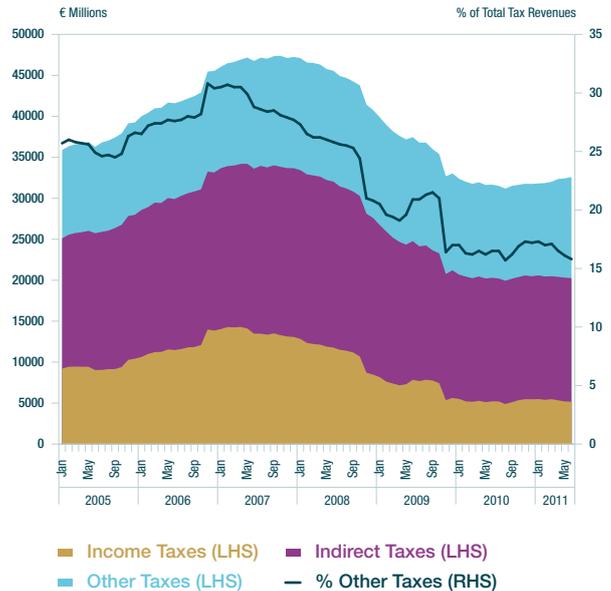
Chart 13: Monthly Exchequer Tax Outturns Relative to Profile



Note: Discontinuity in series due to a lack of data. Typically, profiles for coming year are published with end-February Exchequer outturns.

Source: Central Bank of Ireland calculations and Department of Finance profiles.

Chart 14: Annualised Exchequer Tax Revenues



Note: Other Taxes include Corporation Tax and Capital Taxes (Stamp Duties, Capital Gains Tax and Capital Acquisitions Tax). Indirect Taxes include VAT, Customs and Excise Duties as well as a minor balancing item for remaining unallocated tax receipts. Income taxes include the reclassification of health levy receipts to form part of the USC in 2011.

Source: Central Bank of Ireland calculations.

Stability Programme Update April 2011

The government submitted its Stability Programme Update (SPU) to the European Commission on 29th April 2011. All EU member states are obliged to compile an annual SPU document charting its fiscal roadmap over the current and following four year period (to 2015). On the basis of SPU macro forecasts, the Department of Finance envisage a general government deficit of -10 per cent GDP in 2011, falling to -8.6 per cent GDP in 2012 and gradually to -4.7 per cent by 2014. This deficit path is consistent with the €15bn in nominal consolidation measures set out in the National Recovery Plan 2011-2014 (November 2011), and enshrined within Memorandum of Understanding (MoU) requirements. The government has reinstated its commitment to delivering a deficit below 3 per cent by 2015. The SPU envisages a deficit of 2.8 per cent by 2015 on the basis of (as yet unspecified) €2bn further in gross consolidation measures in 2015. The Department of Finance anticipate the gross government debt profile over the period will evolve from its projected end-2011 position of 111 per cent of GDP, to a peak of 118 per cent in 2013, before falling back to

111 per cent by 2015. This overall projected evolution in the general government finances is similar to the path envisaged by the IMF in its most recently published IMF Staff Report (May 2011), in which they foresee a peak in gross government debt at 120 per cent by 2013.

On the basis of newly released National Income and Expenditure Accounts (NIE) data published on 23rd June, the nominal GDP outcome for 2010 is now some €2bn stronger than previously anticipated. As a result of this denominator effect alone, the 2010 general government deficit now stands at -32 per cent (relative to -32.4 per cent on the basis of Q4 QNA numbers which underpin the SPU numbers) and the 2010 debt ratio stands at 94.9 per cent, as against the provisional 96.2 per cent outturn published in the SPU. The underlying 2010 deficit net of assistance to the banking sector is 11.9 per cent of GDP.

Jobs Initiative May 2011

The government published its Jobs Initiative on 10th May. Given the EU/IMF Programme prescription that the announcements contained in the Jobs Initiative be 'fiscally neutral in 2011 and over the period to 2014', the outlined measures specified fully-costed offsetting revenue raising measures.

Specifically, the Initiative provisions a halving in the lower rate of PRSI until the end of 2013 (to partly neutralise the €1 reversal in minimum wage also announced), to take effect from 1st July 2011. The lower tier VAT rate has been reduced from 13.5 per cent to 9 per cent on tourism-related activities. An additional €135m has been set aside for infrastructural spending. Although the various tax reductions and additional expenditure measures will be funded partially through a reallocation of existing resources, the primary funding source relates to a temporary, four year levy on funded pension schemes and personal pension plans. The levy will apply at a flat rate of 0.6 per cent on the capital value of the assets under management of pension funds as of 30th June 2011 (revised from 1st January in the context of the subsequent Finance Bill) for a 4 year period, and is expected to generate €470m in 2011 and each year thereafter.

EU/IMF Fiscal Targets

Following successful compliance with the first quarter fiscal targets laid out under the EU/IMF Programme, the end Q2 quantitative fiscal Performance Criteria (PC) in the revised April 2011 MoU relating to the Primary Exchequer Balance (PEB) and the central government net debt (national debt excluding National Pension Reserve Fund (NPRF) and cash-based liquid assets) were comfortably met, as was the strict requirement of non-accumulation of external payment arrears by central Government. A €10.8bn Exchequer deficit, alongside cash related debt interest payments of €2.4bn for the year-to-June, place the PEB at €8.4bn. For the purposes of MoU fiscal criteria, the Troika estimate an underlying gross revenue position (Exchequer tax receipts plus gross PRSI revenues) in conjunction with the formal PC target. If gross revenues exceed these anticipated levels, the primary balance target is tightened by a corresponding amount. Gross revenues to end-June exceeded expectations, and correspondingly the PEB target was tightened somewhat to act as a de facto expenditure ceiling. Target tightening aside, the €8.4bn primary exchequer balance outturn exceeded the revised target comfortably. The net debt position reflecting the stock of national debt (€104.6bn at end June) less NPRF and cash assets, indicates that the end-June net debt target (€94.6bn) was also met. The end-Q2 structural benchmark requirement to establish a Fiscal Advisory Council was also adhered to. The council will be formally established in law in the forthcoming Fiscal Responsibility Bill expected to be published by end-December 2011.

EU/IMF funding drawdown

Total EU/IMF Programme funding dispersal to end-June 2011 totals €22.2bn (equivalent to 33 per cent of the overall Programme allocation). There have been no further EU-based auctions to raise funds for Ireland since the May European Financial Stability Mechanism (EFSM) auction, in which €3bn in 10 year bonds were issued at an effective lending rate to the sovereign of 6.46 per cent. A further €16bn in funding is expected to be made available in the final two quarters of 2011, subject to successful completion of forthcoming quarterly programme reviews.

An Timpeallacht Gheilleagrach

I bhfianaise na géarchéime atá fós gan réiteach maidir leis an airgeadas poiblí agus leis na margaí fiachais cheannasaigh sa limistéar euro, níor éirigh le comhdhlúthú airgeadas poiblí na hÉireann ná le bearta luathaithe athchaipitliú agus atheagrú an chórais baincéireachta raon difríochta leathnaithe a chosc ar fhiachas Rialtas na hÉireann. Ina ainneoin sin, tá an filleadh céimseach seo ar staid inmharthana airgeadais agus fhioscach (arna dhearbhu ag an gCoimisiún Eorpach, an BCE agus an CAI) mar bhuntaca riachtanach don fhás sa todhchaí.

Agus an pictiúr iomlán á chur san áireamh, ní fhacthas aon lagú suntasach breise ar tháscairí maicreacnamaíocha na hÉireann le linn na tréimhse ó foilsíodh an Feasachán Ráithiúil deireanach agus léirítear toradh níos fearr ar chomhiomláin OTI agus OTN sna sonraí oifigiúla don bhliain 2010 ná mar a tuaradh i dtosach sna sonraí sealadacha.

Tá an t-ionchas do théarnamh leathan ag brath i gcónaí ar choinníollacha seachtracha. Chonacthas forbairtí contrártha ar thimpeallacht sheachtrach gheilleagar na hÉireann le míonna beaga anuas. Leanann an téarnamh ar an ngníomhaíocht eacnamaíoch dhomhanda faoi luas atá sách láidir ach míchothrom. Chonacthas moilliú áirithe ar an téarnamh sna Stáit Aontaithe, agus lagú ar an bhfás sa limistéar euro, cé go rabhthas ag súil leis sin, agus rinne an crith talún agus an tsunami dochar do gheilleagar na Seapáine. De thoradh na dtosca seo, tháinig maolú ar an bhfás ar roinnt geilleagar sárforbartha ach meastar gur maolú sealadach a bheidh ann. Ar an taobh eile, leanann na geilleagair atá i mbéal forbartha de bheith ag fás go láidir. Dá bhrí sin, ba mheasartha aon athbhreithnithe a rinne gníomhaireachtaí idirnáisiúnta le déanaí ar mheastacháin maidir le fás domhanda aschuir agus le méideanna trádála domhanda. Ag an am céanna, mhéadaigh an teannas i margaí airgeadais an limistéir euro, rud a léiríonn ní hamháin ardleibhéal fhéichiúnas roinnt geilleagar forimeallach, lena n-áirítear Éire, ach thairis sin an imní maidir leis an gcaoi ina réiteoidh rialtais an limistéir euro na fadhbanna agus maidir le hiarmhairtí cásanna éagsúla sa chái seo. Tá rioscaí eile ann fós, lena n-áirítear rioscaí maidir leis na nithe seo a leanas: róbhorradh i ngeilleagair atá i mbéal forbartha, gluaiseachtaí i bpraghsanna tráchtearraí, míchothromaíochtaí domhanda atá ag teacht

chun cinn arís agus imní maidir le fiachas ceannasach i gcoitinne.

I bhfianaise na bhforbairtí seachtracha sin agus, go deimhin, i bhfianaise fhairsinge an choigeartaithe fhioscaigh sa gheilleagar intíre, beidh an fás ar gheilleagar na hÉireann faoi réir níos mó éiginnteachta i mbliana. Ar a shon sin, níl cúis ar bith ann go n-athrófaí go suntasach meastacháin an Bhainc roimhe seo maidir leis na príomh-chomhiomláin eacnamaíocha. Dá bhrí sin, meastar fós go dtiocfaidh fás 0.8 faoin gcéad, a bheag nó a mhór, i mbliana ar OTI ach tá seans ann go dtiocfaidh laghdú beag thart ar 0.3 faoin gcéad ar OTN. Is dócha go leanfar é seo le fás níos láidre sa bhliain 2012 agus táthar ag súil go dtiocfaidh méadú thart ar 2.1 faoin gcéad ar OTI agus méadú thart ar 1 faoin gcéad ar OTN. Níl athrú ar bith ar an scéal leathan atá taobh thiar de na figiúirí seo. Leanann onnmhairí de bheith ag fás fad a leanann an t-éileamh intíre de bheith lag, ach tá maolú ag teacht de réir a chéile ar an gcúingú ar an éileamh intíre sin. Níor chobhsaigh an fhostaíocht fós, rud a léiríonn ráta measartha an fháis aschuir agus a léiríonn go mbíonn an fás sin faoi thionchar earnálacha nach earnálacha dlúthshaothair iad. Beidh deireadh na bliana seo, nó is dóchúla, an bhliain seo chugainn druidte linn sula mbeidh aon fhás ar fhostaíocht. Tá seans ann go bhfuil an barrluach difhfostaíochta bainte amach cheana féin ach is léiriú é seo ar an méadú ar an nglanmirce amach agus ar rannpháirtíocht íslithe. Tá na brúnna boilscitheacha maolaithe i gcónaí ach tá boilsciú dearfach ann de réir mar a bhíonn tionchar ag arduithe praghsanna seachtracha ar phraghsanna intíre. Tá barrachas neamhthoirtéiseach níos túsce ná mar a bhíodh ag súil leis ar an gcuntas reatha seachtrach freisin.

Rinneadh dul chun cinn suntasach i dtaca leis na príomhdhúshláin atá os comhair an gheilleagair. Anuas go dtí lár na bliana, bhí na forbairtí fíoscacha ag teacht, a bheag nó a mhór, leis na hionchais, de réir mar a ghabhann lánéifeacht leis na hathruithe a rinneadh sa Bhuiséad deireanach. Ina theannta sin, d'hearbhaigh an Rialtas a thiomantas do na coigeartuithe riachtanacha go léir nach mór a dhéanamh i mBuiséad 2012 chun go gcoinneofaí an ceartú fíoscach ar an gconair cheart. Is fearr go ndéanfar ardleibhéal mionsonraí a chinneadh agus a fhoilsiú maidir leis an bpacáiste iomlán um choigeartú fíoscach. Leis seo, cuirfear deireadh leis an éiginnteacht atá ann do theaghligh intíre agus do ghnólachtaí intíre agus rannchuideofar leis an bpróiseas foriomlán um choigeartú. D'fhéadfadh go gcuideodh sé le héifeachtaí coigiltis réamhchúramaigh a theorannú trí shoiléiriú a dhéanamh ar an tionchar a bheidh ag an bpacáiste foriomlán um choigeartú fíoscach ar theaghligh agus ar ghnólachtaí, ach ba cheart aird cheart a thabhairt ar na deacrachtaí a bhaineann le sainathint agus comhaontú na gcoigeartuithe mionsonraithe. Leis an gComhairle um Chomhairle Fhíoscach arna bunú le déanaí ag an Rialtas, ba cheart go gcinnteofaí gur conair inmharthana atá sa chonair fhíoscach.

Rinneadh dul chun cinn suntasach ar athchaipitiú agus ar athstruchtúrú na hearnála baincéireachta freisin. Ghlac na Banc páirt i gcleachtaí um bainistiú dlíteanais chaipitiúil chun go dteorannófar méid na gcistí poiblí nach mór a úsáid chun a chinntiú go gcomhlíonfaidh na hinstitiúidí go léir na riachtanais chaipitil arna leagan amach ag an mBanc i ndiaidh an Athbheithnithe ar Leordhóthanacht Stuamachta Caipitil a rinneadh in 2011 agus ar foilsíodh a chuid torthaí ag deireadh mhí an Mhárta. Ina theannta sin, tá na banc rannpháirteach i bpróiseas díghiarála faoina scarfaidh siad, de réir a chéile ach faoi luas measartha, le haon sócmhainní dá gcuid nach bunsócmhainní iad, chun go laghdófar a gcóimheas iasacht-le-taisce agus a spleáchas ar mhaoiniú ón mBanc Ceannais. Is próiseas fadálach é seo agus déanfar athbheithniú air go rialta faoi Chlár AE/CAI. Tá athstruchtúrú faoi lán seoil freisin agus rinneadh INBS a ionchorprú in Anglo

Irish Bank. Déanfar an t-eintiteas a éiríonn as an ionchorprú sin a athainmniú mar an Irish Bank Resolution Corporation a mbeidh de phríomhchuspóir aige an t-uasluch is féidir a ghnóthú ó shócmhainní Anglo Irish Bank agus INBS i gcaitheamh aimsire thar ceann an cháiniócóra. Ina theannta sin, rinneadh EBS a chumasc le AIB chun ceann amháin den dá bhanc “crann taca” a bheidh ann amach anseo maille le Bank of Ireland.

Rinneadh breis dul chun cinn maidir leis an iomaíochas sa mhéid go bhfanfaidh na leibhéil tuarastail mar atá, a bheag nó a mhór, don bhliain seo agus don bhliain seo chugainn. Tá sé seo éagsúil leis an staid atá i réim i bhformhór chomhpháirtithe trádála na tíre ina bhfeictear méadú leanúnach ar thuarastail. Tríd an méid seo, maille le gníomhaíocht fhabhrach táirgiúlachta, éascófar don tír an t-iomaíochas a cailleadh le linn am an bhorrtha a aisghabháil. Mar a tugadh le fios i bhFeasacháin roimhe seo, áfach, is gá dul chun cinn breise a dhéanamh. Ní mór dhá phointe ar leith a chur i gcuntas anseo. Ar an gcéad dul síos, ní mór aird a thabhairt ar an bpointe teicniúil go bhféadfar go ndéanfar costais aonad saothair a shaobhadh leis an gcúngú gear in earnálacha íostáirgiúlachta agus leis an leathnú ar earnálacha ardtáirgiúlachta. Is aistriú dearfach é an t-aistriú gníomhaíochta seo ach ciallaíonn sé gur lú an feabhas ar iomaíochas i bhformhór na n-earnálacha éagsúla ná mar a thugtar le fios leis an tomhas iomlán. Ar an dara dul síos, tá gá ann i gcónaí le hathchóiriú struchtúrach chun go bhfeabhsófar an fás ar tháirgiúlacht trí iomaíochas breise a thabhairt isteach in earnálacha seirbhísí poiblí áirithe agus tríd an earnáil phoiblí a athchóiriú chun a héifeachtúlacht a fheabhsú. Tá an cumas ag na bearta sin fás ar an ngeilleagar a spreagadh thar an meántearma agus stóinseacht an gheilleagair a neartú i gcás suaití seachtracha. Leis na bearta sin freisin, maille leis na bearta a leagadh amach cheana féin, féadfar an geilleagar a threorú chun go dtabharfaidh sé aghaidh ar chonair a imeoidh ó staid reatha an rófhíachais a luaithe is féidir.

Financing Developments in the Irish Economy

Overview

Recent months have been characterised by international concerns about sovereign debt in peripheral euro area countries, particularly as Portugal became the third country to enter into an EU/IMF programme, and investor sentiment towards Greece became increasingly negative. After an initial fall following the PCAR results, upward pressures on Irish Government bond yields re-emerged in April, reflecting increased market concerns about the peripheral economies. A lack of clarity on how sovereign difficulties might be resolved led to a general widening of spreads that intensified in June. Irish banks continued to have difficulties in sourcing funding, although reliance on Central Bank funding was reduced, partly due to the receipt of deposits from the National Treasury Management Agency (NTMA) in advance of further capital injections into these institutions. Deposit outflows from Irish banks continued over the quarter, although the fall in household and non-financial corporation (NFC) deposits was somewhat offset by inflows from other financial intermediaries (OFIs). While private-sector credit continued to grow on an annual basis, this increase has been driven by increases in credit institutions' holdings of bonds issued by NAMA, with the amount of loans outstanding from domestic banks to households and NFCs continuing to decline.

Credit advanced by resident banks to the Government sector, rose sharply in the first quarter of 2011, reflecting the increase of €9.1 billion in promissory notes issued. While the liabilities of Government as measured in Quarterly Financial Accounts (QFA) decreased by €2 billion over the fourth quarter of 2010, this was due to the use of existing deposits to repay debts and valuation effects arising from the falling market value of bonds issued. In contrast, debt as measured at nominal value for Excessive Deficit Procedure (EDP) purposes, continued to increase, rising by 4.3 per cent in Q4 2010.

While the NFC sector continued to expand over the fourth quarter of 2010, its net liability position increased, as financial liabilities grew at a faster pace than financial assets. Reliance on equity funding increased over the fourth quarter, with its share growing by 3.2 per cent, in contrast to loan funding whose share declined by 3.6 per cent. Loans by resident credit institutions to NFCs, which are the primary source of funding for indigenous

firms, fell by an average 2.1 per cent in the three months ending May 2011. This decline is partly attributable to a fall in longer-term funding of over five years maturity, with shorter-term facilities including overdrafts increasing over the quarter, possibly signalling greater dependence on bank funding for working capital purposes. Interest rates on loans to NFCs continued to trend upwards, with smaller loans up to €1 million experiencing the largest increases. Multinational companies undertook substantial direct investment transactions over the quarter to March 2011, with €5.4 billion invested abroad by Irish-owned companies and inward investment of €15.9 billion by foreign-owned companies.

Household wealth continued to decline, primarily due to continuing falls in housing assets, in the quarter to end-December 2010. Overall it is estimated that household net worth, including household wealth, has declined by around 32 per cent since its peak in 2006. Households continued to deleverage in the three months to end-May, with the

amount of loans outstanding falling by €468 million. Interest rates on new borrowings continued to increase, with for instance, variable rate consumer loans almost 200 basis points higher over the year to May 2011. New data, which show that 86 per cent of mortgages outstanding are floating rate, highlight the impact of ECB rate increases on mortgage interest rates. In addition to tracker mortgages which rise in line with ECB rate increases, standard variable rate mortgages, which themselves account for 31 per cent of mortgages outstanding, have seen increases of greater magnitude as banks seek to increase margins.

The rapid growth in the value of investment funds located in Ireland stalled in the first quarter of 2011, in line with developments in the euro area. Lower transaction levels and negative revaluation effects, particularly in bond funds, contributed to the slowdown. There were also negative revaluations for equity funds in the first quarter of 2011, as international stock markets declined following the Japanese earthquake. Nevertheless, the strong growth in recent quarters saw the Irish fund industry's share of the euro area market grow from 9 per cent to 11 per cent over the year to March 2011.

There was a marginal decline in the assets of Irish insurance corporations and pension funds (ICPFs) in the fourth quarter of 2010, following a period of strong growth from the beginning of 2009. The balance sheet increases over recent quarters arise from a combination of factors, including the relocation of company headquarters to Ireland as well as transactions and revaluations.

Monetary Financial Institutions

Credit Institutions' Funding

For the Irish-owned credit institutions, the difficulties in sourcing market-based funding continued in recent months, and were reflected in the ongoing reliance of these institutions on

central bank liquidity operations as a source of funding. In spite of these persistent difficulties, Irish-owned credit institutions have actually reduced their overall borrowings from the Eurosystem, as well as their borrowings from the Central Bank of Ireland in recent months. This is largely the result of a temporary deposit boost from the NTMA with the Irish-owned banks. These funds are due to be withdrawn and returned to the banks as capital before end-July, as part of a €24 billion recapitalisation programme agreed after the publication of the second Prudential Capital Assessment Review (PCAR).

Long-term market-based debt financing also continued to decline during the first four months of 2011, albeit at a slower pace. Overall, however, there were net issuances of debt securities of just under €11 billion in the first four months of the year, boosted by significant issuances of short-term debt, particularly during the month of January. These reflected the issue of own-use bank bonds, retained by the banks for use as collateral for Eurosystem monetary policy operations.

Deposits held in Irish resident credit institutions by the Irish private sector fell by an average annual rate of 9.3 per cent for the three months ending May 2011.¹ The monthly net flow of deposits averaged minus €101 million in the three months ending May 2011. This reflected three-month average net flows of minus €365 million in household deposits and minus €419 million in deposits from NFCs. Deposits from ICPFs also fell, by an average of €194 million during the same period. However, these net outflows were partly offset by an increase in deposits from OFIs. The average monthly net flow of OFI deposits was €878 million in the three months ending May 2011, and this development largely reflects inter-affiliate transactions during the period.

¹ The flows and growth rates for deposits and loans are fully adjusted to exclude the impact of non-transaction related effects, such as changes in the reporting population and valuation changes due to fluctuations in exchange rates.

Chart 1: Private-Sector Deposits, Annual Rate of Change



Source: Money and Banking Statistics, Central Bank of Ireland.

Overnight deposits fell by an annual rate of 1.4 per cent, based on the average for the three months ending May 2011. During these three months, there was an average monthly net increase of €470 million in overnight deposits. The significant increase in OFI deposits outlined above offset an average monthly net flow of minus €322 million in overnight deposits from households during this three-month period. However, there were also net monthly increases in overnight deposits from NFCs and ICPFs during the month of May. Private-sector term deposits with agreed maturity up to two years declined at an annual rate of 19.5 per cent, based on the average for the three months ending May. Household deposits in this category recorded an average monthly net increase of €196 million during the three months ending May, while all other depositor sectors recorded net outflows during this period.

Non-resident private-sector deposits fell by an annual rate of 21.6 per cent, based on the average for the three months ending May 2011. The equivalent rate of change in private-sector deposits from other euro area residents was minus 10.8 per cent during this period,

while deposits from the non-euro area private sector fell by 31.1 per cent.

On an annual basis Irish resident M1 and M2 continued to fall, although the pace of decline eased in recent months. Currency in circulation increased at an annual rate of 3.9 per cent, based on the average for the three months ending May. As a result of this, and the developments in overnight deposits outlined above, Irish resident M1 stabilised in recent months, recording an annual rate of decline of just 0.1 per cent in the month of May. However, M2 fell by 9.2 per cent year-on-year in May, and the Irish contribution to euro area M3 fell at an annual rate of 8.2 per cent, based on the average for the three months ending May 2011. On the contrary, euro area M3 grew at an average annual rate of 2.3 per cent during this three month period.

The Eurosystem continues to offer refinancing operations at a fixed rate tender with full allotment. The main refinancing operations rate rose to 1.25 per cent in April 2011. The borrowings of Irish resident credit institutions (which include IFSC entities) from the Eurosystem relating to monetary policy operations continued to fall in recent months, from a high of €138.2 billion in November 2010 to €102.3 billion in May 2011. Of this €35.9 billion reduction, €22.9 billion was due to a decline in borrowings from the Eurosystem by domestic market credit institutions² over the period, bringing Eurosystem borrowing by these institutions to €74.4 billion at end-May 2011.

Although the Irish-owned banks cannot currently access the interbank market as a main source of funding, it is worth noting that the general cost of borrowing in these markets has increased in recent months, following a period of relative stability in money market rates in the final months of 2010. Recent developments in interbank rates reflect market expectations of further increases in the ECB's main refinancing rate. At end-May 2011, the one-month, three-month and twelve-month

² Domestic market credit institutions are those with a significant retail presence in the State, including both Irish and foreign-owned institutions. This category excludes the activities of more internationally focused credit institutions such as those in the IFSC. A list of domestic market credit institutions is available at <http://www.centralbank.ie/polstats/stats/cmab/Documents/Credit%20Institutions%20resident%20in%20the%20Republic%20of%20Ireland.pdf>.

EURIBOR were 80, 73 and 88 basis points higher, respectively, than their end-May 2010 levels. Meanwhile, retail interest rates on deposits in Ireland increased marginally in April and May 2011, following a decline in the first quarter of the year. The weighted average interest rate on outstanding household deposits with agreed maturity up to two years was just 8 basis points lower in May 2011 compared to May 2010. Interest rates on NFC deposits moved upwards in 2011. The weighted average interest rate on outstanding NFC deposits with agreed maturity up to two years was 58 basis points higher in May 2011 than its equivalent in the previous year.

Aggregate Credit Developments

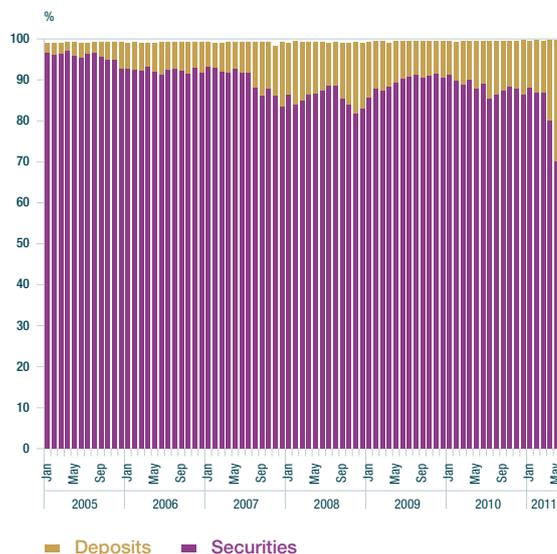
Credit advanced to the Government by Irish resident credit institutions has increased considerably over the course of the last year, both through loans to Government and through credit institutions' holdings of Government securities. The outstanding amount of loans to Government was €28.9 billion in May 2011, compared to just €15.3 billion a year earlier. This is predominantly due to an increase in promissory notes issued to the banking sector, which are treated as loans in the Government accounts. Holdings of securities issued by the Government stood at €10.2 billion in May 2011, compared to €7.8 billion in May 2010.

Private-sector credit grew at an annual rate of 5.2 per cent, based on the average for the three months ending May 2011. This has been driven by increases in credit institutions' holdings of securities issued by the private sector throughout the course of the last year. Debt securities issued by OFIs, in particular bonds issued by NAMA, have been the main source of this growth. However, excluding this factor, the amount of loans outstanding to the private sector by Irish resident credit institutions continues to decline. The annual rate of change in these loans was minus 4.4 per cent based on the average for the three months ending May 2011.

Money Market Funds

The value of money market funds (MMFs) shares/units in issue in Ireland recorded a considerable increase in May 2011 for the first time since November 2010. Shares had been declining steadily since December 2010, with a particularly large decline recorded in March 2011, before the increase in May. Most of the decline over this period was accounted for by negative revaluations, before this turned positive in May 2011 for the first time since November 2010. Despite negative revaluations of €10.6 billion since the start of 2011, new MMF shares of around of €12 billion have been purchased over the same period. At end-May 2011, the value of MMF shares in issue in Ireland was €359.2 billion, down from a recent peak of €366.6 billion in November 2010. The value of total MMF shares/units in issue in the euro area has generally been declining since their peak in February 2009, but recorded an increase in May 2011, largely due to the increased value of Irish MMFs' shares/units. This allowed Ireland to continue to increase its share of euro area MMF shares in issue, and at end-May 2011, it accounted for around one third of total euro area MMF shares. The holders of shares issued by MMFs resident in Ireland are mostly based outside the euro area, which is contrary to the pattern for the aggregate euro area, where nearly 60 per cent of all shares are held by residents.

Chart 2: Proportion of Irish Resident MMFs' Assets Under Management in Securities and Deposits



Source: Central Bank of Ireland.

MMFs primarily invest in money market instruments, other MMF shares/units, other transferable debt instruments with short maturities, and bank deposits, or pursue a rate of return that approaches the interest rates of money market instruments. Irish resident MMFs invest mostly in debt securities or bonds issued by residents outside the euro area, with short maturity of up to one year. During the financial turmoil, particularly in 2007 and 2008, deposits increased as a proportion of Irish resident MMFs' balance sheets. This most likely reflected a desire by the funds to remove some of their assets from riskier categories. During the second half of 2009 deposits started to revert back to their usual proportion of assets under management (AUM). However, the last few months have seen this scenario reverse again, and at end-May 2011, MMFs held nearly 30 per cent of their AUM in deposits. This proportion is well in excess of pre-crisis and crisis levels and is the highest it has ever been. The increase in deposits came after MMFs divested some non-euro area securities other than shares, and put the proceeds into deposits. The biggest movement in April and May was the sale of securities issued by non-euro area monetary financial institutions (MFIs), primarily instruments denominated in non-euro and with a maturity of up to one year. The proceeds of these sales were put on deposit, mostly in non-euro area MFIs, and to a lesser extent, in other euro area countries, while deposits with Irish resident institutions recorded a small decline. In addition, it would appear that the proceeds from the increase in MMF shares/units in May were also placed on deposit.

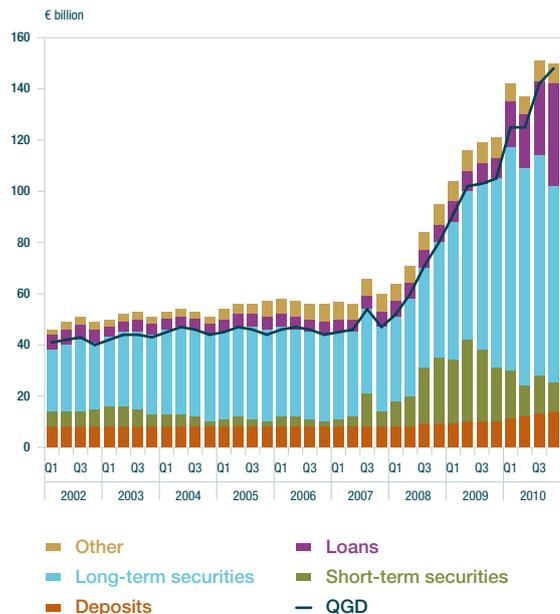
Government

Debt and Deficit Developments

The liabilities and financial surplus/deficit of the Government sector are published by the Central Bank on a quarterly basis as part of the Quarterly Financial Accounts (QFA) series. The accounts show that the gross liabilities of Government, as depicted in Chart 3, decreased by €2 billion in Q4 2010, falling

to a total of €150 billion. The reduction in the liabilities occurred as the Government used deposits built up in previous quarters to repay debt securities and as the sovereign market turmoil led the market value of Government securities to fall. Both of these factors outweighed the effect on liabilities of the final instalment of the promissory notes issued to the banks of €9.1 billion during the quarter. By Q4 2010, promissory notes issued to Anglo Irish Bank, Irish Nationwide Building Society and EBS totalled €30.7 billion, representing 20.4 per cent of Government liabilities. Promissory notes impact on Government debt as soon as they are issued; however, they do not require upfront funding so their actual financing cost is spread out over time. The chart also shows quarterly government debt (QGD), which is the standard quarterly measure of debt consistent with Excessive Deficit Procedure (EDP) methodology³. QGD, in contrast to the QFA measure, continued its upward trend over the quarter, increasing by 4.3 per cent. These conflicting trends reflect methodological issues, as QGD measures debt at nominal value and therefore is not impacted by the decreasing market value of securities issued.

Chart 3: Government Liabilities

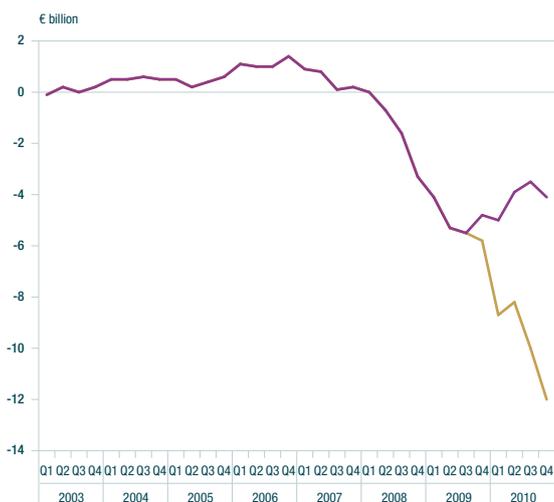


Sources: Quarterly Financial Accounts for Ireland, Central Bank of Ireland, and Quarterly Government Debt, Eurostat.

³ Government liabilities in Quarterly Financial Accounts (QFA) differ from the EDP measure of debt, as they are calculated on a non-consolidated basis, and employ different coverage and valuation criteria. Therefore, in line with international government statistical standards, QFA government liabilities are generally higher than EDP debt.

The Government surplus/deficit, based on a four-quarter moving average to smooth seasonal effects, is depicted in Chart 4. The deficit includes capital transfers to Anglo Irish Bank, Irish Nationwide Building Society and EBS totalling €35.58 billion up to Q4 2010. The €10.7 billion capital injections into Bank of Ireland and Allied Irish Bank are treated as financial transactions (or investments) in Government accounts and therefore, have no impact on the deficit. The chart also shows the impact on the surplus/deficit of capital transfers into the Irish banks between Q4 2009 and Q4 2010. During 2010, Ireland recorded its highest ever deficit; however, the deficit was lower than the previous year when capital transfers are excluded, as shown in Chart 4.

Chart 4: The Four-Quarter Moving Average of the Government Surplus/Deficit



- 4-quarter moving average of surplus/deficit including capital injections
- 4-quarter moving average of surplus/deficit excluding capital injections

Source: Quarterly Financial Accounts for Ireland, Central Bank of Ireland.

Sovereign Debt Market

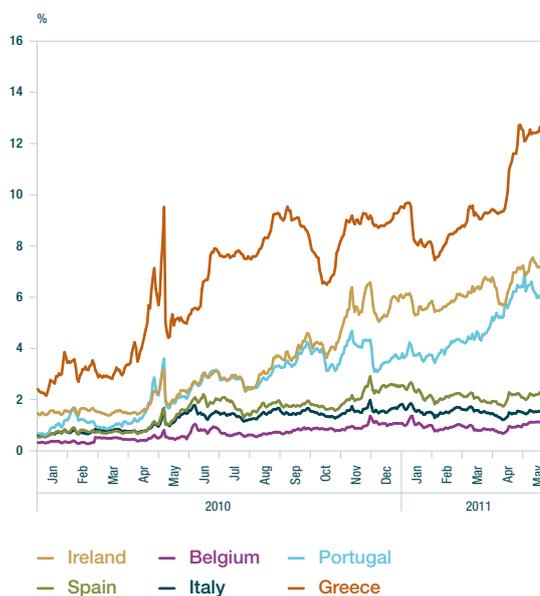
Tensions in the euro area sovereign debt markets continued to increase in the last three months. Portugal became the third euro area country to enter the EU/IMF Programme for financial assistance on 6 April 2011. This followed the failure of the Portuguese Parliament to pass the fiscal austerity package on 23 March 2011, and the resignation of the Prime Minister. Coupled with this was the downgrading of Portugal's sovereign credit rating at end-March which

led Portuguese sovereign yields to continue their upward trend.

Investor concerns regarding the repayment capacity of several euro area sovereigns continued during April and May. By mid-May, it became clear that a number of targets outlined for Greece as part of their EU/IMF financial assistance programme, were not met. Negative investor sentiment as well as market participant concerns regarding proposals for the voluntary restructuring of Greek sovereign debt, led yields on Greek bonds to rise in excess of 14 per cent towards the end of May. The market tensions were further exacerbated in June, as it became clear that further programme support would be required for Greece, and uncertainty increased over the nature of possible private-sector involvement in addressing the Greek debt situation.

For other euro area countries, there was evidence of decoupling from the Member States in the EU/IMF Programme in the period up to end-May, as bond yields were not impacted by developments in the sovereign debt markets of the Programme countries. This provided respite for the bond yields of other euro area countries, which remained flat over this period – see Chart 5. However, this trend has since reversed with spreads widening for a number of countries who are not part of the Programme.

Chart 5: Selected Euro Area Ten-Year Sovereign Bond Spreads over German Bunds



Source: Thomson Reuters Datastream.

Following the announcement of the Irish bank stress test results at end-March – including the announcement that bank recapitalisation costs would be up to €24 billion, which was less than the full amount provided for in the EU/IMF Programme of Financial Support – the yields on Irish Government bonds fell by almost one hundred basis points, from just over 10 per cent by mid-April, see Chart 6. The initial positive sentiment from market participants was temporary however, as market concerns about peripheral economies, and particularly the repayment capacity of Greece, resurfaced. This negative sentiment continued to impact on Irish sovereign bond yields throughout April and May, and was further exacerbated in June, as concerns about Greece deepened.

Chart 6: Irish Government Ten-Year Bond Yields



Source: Thomson Reuters Datastream.

In order to raise monies as part of the EU/IMF programme for Ireland, the second bond issue of €4.6 billion by the European Financial Stability Mechanism (EFSM) was launched successfully on 17 March. Some €3.4 billion of the monies raised from the bond auction were on-lent to Ireland. The disbursements received by Ireland as part of the programme by end-March amounted to €17.6 billion, comprising €8.4 billion from the EFSM, €3.6 billion from the European Financial Stability Facility (EFSF), and €5.6 billion from the IMF's Extended Fund Facility.

The outstanding nominal volume of existing Irish Government long-term bonds in issue remained at €89.6 billion at end-May 2011. At end-May, the holders of Government bonds continued to be predominantly non-resident, where 83 per cent of Government bonds in issue were held by foreign investors. Resident holders predominantly comprise banks, arising from the use of Government bonds as collateral for Eurosystem monetary policy operations.

Chart 7: Holders of Irish Government Bonds



Source: Central Bank of Ireland.

Institutional Investors: Investment Funds, Insurance Corporations & Pension Funds

Investment Funds

Rapid growth in the value of Irish resident investment funds stalled in the first quarter of 2011, due to significant negative revaluation effects (asset prices and exchange rates) and a slowdown in the pace of transaction inflows. Measured by total shares/units in issue, the overall value of these funds increased in the quarter by €2.5 billion, or 4 per cent. Transaction inflows of €15.2 billion, including newly launched funds with shares worth €3.8 billion, were mostly offset by negative revaluations amounting to €12.7 billion. These

revaluations, reflecting declines in both equity and certain bond markets, are in line with the experience of the investment funds industry throughout the euro area. Transaction inflows were significantly lower than recent quarters, largely reflecting developments in bond funds. This is likely to reflect the easing of very strong dynamics in the second half of last year rather than a loss in confidence due to sovereign debt market tensions, as transaction inflows into bond funds did not slow markedly for the euro area as a whole. Despite these latest developments, total assets of the investment fund industry in Ireland increased by €124 billion or 26 per cent over the year to end-March 2011, from €484 billion to €608 billion, driven primarily by transaction inflows of €86 billion. This was much stronger than for the euro area as a whole, resulting in Ireland's share of euro-area investment funds increasing from 9 to 11 per cent over the year to March 2011.

Chart 8: Change in Shares in Issue for Irish Resident Investment Funds



Source: Investment Funds Statistics, Central Bank of Ireland.

Bond funds were the only category to decline in value in the first quarter, by around 2 per cent, as negative revaluations of €5.6 billion more than offset inflows of €3.3 billion. These revaluations occurred in the context of elevated tensions in certain sovereign debt markets and declines in the prices of benchmark government bonds of major European countries, such as Germany, in the quarter. Transaction inflows

to bond funds slowed from an average of €10.8 billion per quarter in 2010, although they were in line with average inflows of €2.4 billion per quarter in 2009. Equity funds increased in value by €2 billion, or around 1 per cent over the quarter, despite negative revaluations amounting to €5.5 billion, reflecting declines in the main global equity markets, with, in particular, the Japanese NIKKEI falling sharply after the earthquake in Japan. Substantial transaction inflows of €7.5 billion suggest, however, that confidence has not been substantially eroded. Hedge funds increased in value by €1.8 billion, or around 3 per cent in the first quarter, based largely on inflows, with revaluations having a minimal impact. Remaining funds, which include mixed, real estate and other funds, increased in value by €1 billion, or 1 per cent in Quarter 1, despite negative revaluations across the main asset classes, averaging 2 per cent.

Chart 9: Change in Value of Shares/Units by Investment Category, Q1 2011



Source: Investment Funds Statistics, Central Bank of Ireland.

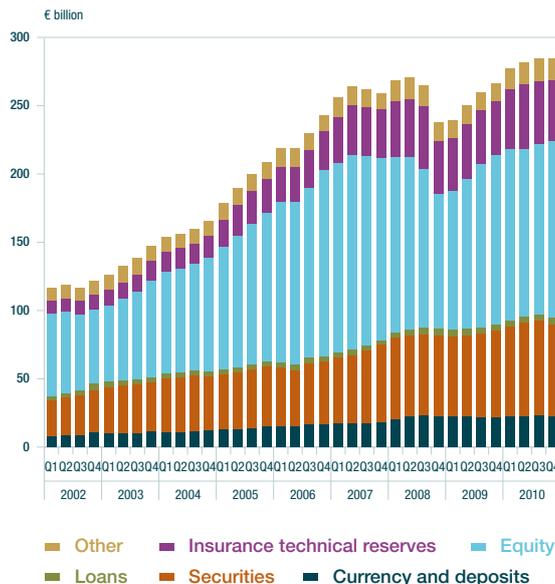
Insurance Corporations and Pension Funds

Irish resident insurance corporations and pension funds (ICPFs) accounted for just over 6.9 per cent of the total financial assets of the Irish financial sector in Q4 2010. This sector has significant links and interconnectedness with both the domestic economy and the rest of the world. Within the domestic economy, it has an active role as ICPF liabilities represent an important store of household financial

wealth. The household sector now has greater exposure to the performance of the industry, reflecting the move towards unit-linked insurance policies and defined contribution pension schemes, which apportion risk directly to the policyholder. The Irish resident insurance sector also has increasing links with the rest of the world through the expansion of the domestic reinsurance industry and the rise in the number of general insurers locating their pan-European headquarters in Ireland.

The asset portfolio of the ICPF sector displayed a strong upward trend from the beginning of the series in Q1 2002, to Q2 2008, appreciating in value by 131 per cent over this period. This strong upward trend continued in 2009 and 2010 after a sharp contraction in 2008 (Chart 10). In Q4 2010 although assets recorded a slight 0.04 per cent decline they stood at €284 billion, the second highest level recorded in the series. The slight decline was driven by 4.3 and 2.7 per cent falls in insurance technical reserves and securities holdings respectively. These reductions were largely offset by a 3.6 per cent rise in equity, which is the largest component in ICPFs' portfolio, accounting for over 40 per cent of assets.

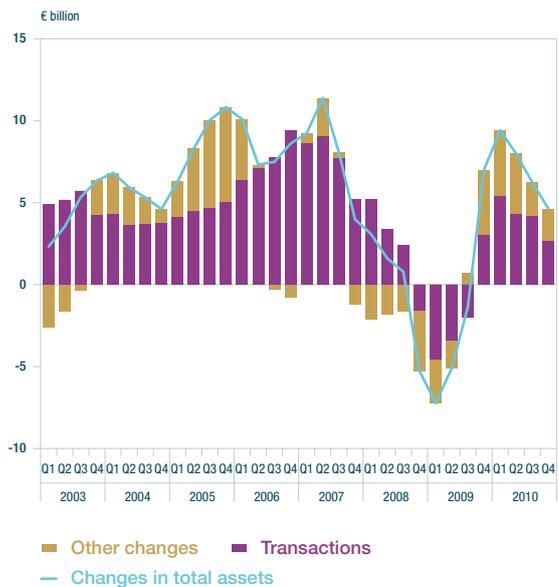
Chart 10: ICPFs – Assets Portfolio



Source: Quarterly Financial Accounts for Ireland, Central Bank of Ireland.

Changes in the balance sheet position of the ICPF sector are driven by two factors, financial transactions and other changes, as shown in Chart 11. The impact of the financial crisis is shown by disinvestment and the fall in the value of portfolio holdings between Q4 2008 and Q3 2009. Since the last quarter of 2009, the sector has begun to expand with almost equal contributions from asset transactions and other changes. These other changes include both valuation effects and changes in the population, resulting from an increase in the number of insurance companies locating in Ireland. In Q4 2010, the expansion in the sector continued but at a slower pace than in the previous quarters.

Chart 11: Contribution of Transactions in Assets and Valuation Changes to Changes in Total Assets, Four-Quarter Moving Average



Source: Quarterly Financial Accounts for Ireland, Central Bank of Ireland.

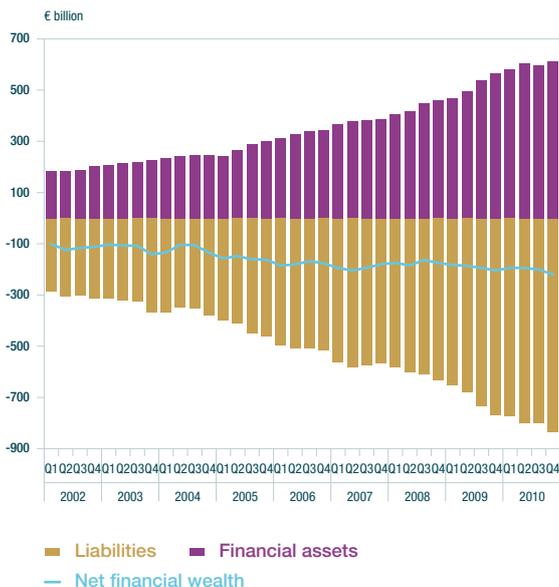
Non-Financial Corporations

The substantial growth in the non-financial corporation sector's balance sheet since 2002 can be seen in Chart 12. During Q4 2010, the sector continued to expand. The stock of financial assets recorded a 2.8 per cent increase from the previous quarter, to reach €614 billion. Total liabilities also increased in Q4 2010, recording a rise of 4.4 per cent.

4 Net financial wealth is defined as the difference between financial assets and liabilities. It should be noted that net financial wealth does not include non-financial assets.

Overall, the net financial wealth⁴ of non-financial corporations fell to minus €220 billion in Q4 2010, compared to minus €200 billion in the previous quarter. The decline occurred as the increase in the sector's financial liabilities outstripped the rise in its financial assets.

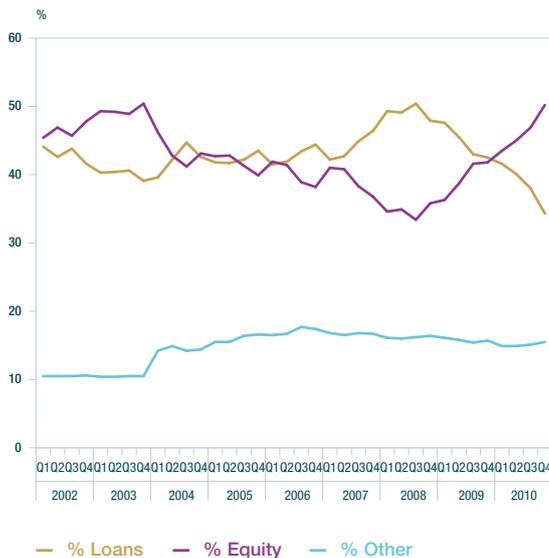
Chart 12: Non-Financial Corporates' Net Financial Wealth



Source: Quarterly Financial Accounts for Ireland, Central Bank of Ireland.

Funding sources for the NFC sector are reflected in their liability portfolio as shown in Chart 13. The primary funding instruments of the NFC sector are: loans; shares; and other accounts payable (primarily trade credits and other accounts receivable). The relative contribution of each of these instruments as sources of funding to the sector is depicted in Chart 13. From Q3 2004 onwards, funding through loans tended to be proportionately higher than equity funding. This trend was reversed however in Q1 2010, as loans from monetary financial institutions declined. The increased reliance on equity funding relative to loans continued in Q4 2010, with a 3.2 per cent increase in equity funding and corresponding 3.6 per cent decrease in loans. The rate of decline in the percentage of funding from loans has been increasing since Q4 2009, and this trend continued in Q4 2010. The rate at which NFCs are switching to equity as a source of funding also increased in the quarter.

Chart 13: Non-Financial Corporates' Funding



Source: Quarterly Financial Accounts for Ireland, Central Bank of Ireland.

Credit Advanced to the NFC Sector by Irish Resident Credit Institutions

Credit advanced to the resident NFC sector (inclusive of loans and credit institutions' holdings of securities issued by NFCs) declined at an annual rate of 2.3 per cent, based on the average for the three months ending May 2011. The monthly net flow of credit to the NFC sector, which removes any non-transaction effects, averaged minus €270 million during this three-month period.

The annual rate of change in loans to Irish resident NFCs averaged minus 2.1 per cent in the three months ending May 2011. Loan finance is the primary source of funding for indigenous industry, primarily SMEs, unlike the multinational sector which has greater access to market capital. Longer-term loans with an original maturity of over five years have been the main component of the overall contraction in lending to NFCs over the last year. The annual rate of decline has eased in recent months, averaging 6.9 per cent in the three months ending May. By contrast, short-term loans to NFCs with an original maturity of up to one year, which includes the use of overdraft facilities, recorded an annual growth rate of 10.1 per cent, based on the average for the three months ending May.

According to the Irish results of the July 2011 Euro Area Bank Lending Survey, the demand for loans from enterprises decreased during the second quarter of 2011, for the first time since the second quarter of 2010. The decline in demand was largely attributed to falling levels of fixed investment and reduced requirements for inventory financing and working capital facilities. Participating institutions also reported that the adoption of the Basel III framework may lead to a mild tightening of credit standards with regard to loans for enterprises during the second half of 2011 and 2012.

Chart 14: Loans to Irish Resident NFCs, Annual Change



Source: Money and Banking Statistics, Central Bank of Ireland.

Turning to developments in credit by sector of economic activity, the most recent data show that the annual rate of change in non-financial private-sector credit was minus 3.9 per cent at end-March 2011, equivalent to a net flow of minus €4.5 billion. The construction sector accounted for just under half of this overall decline in credit over the year and was itself 46.3 per cent lower on an annual basis. Meanwhile the underlying rate of change in real estate and development credit (which adjusts for the significant impact of transfers

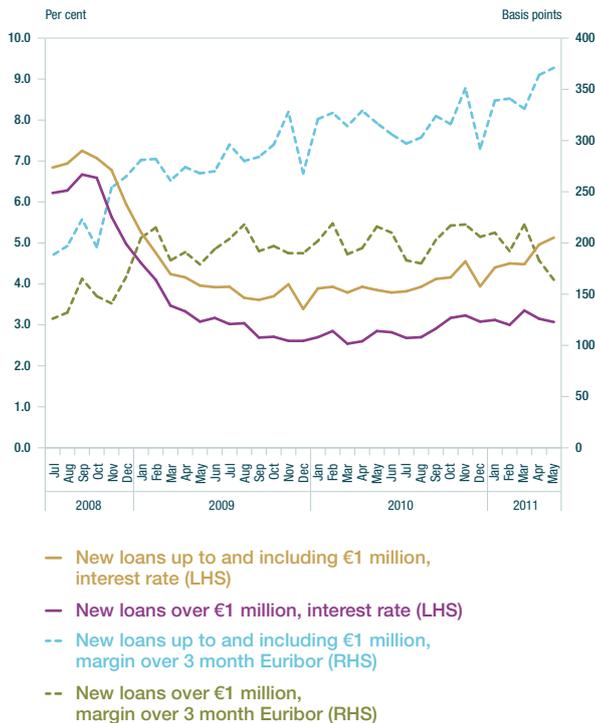
to NAMA) was minus 1.1 per cent. The total amount of credit advanced to the non-property, non-financial business sectors stood at €41.7 billion at end-March 2011, a decline of 3.8 per cent on an annual basis. Credit advanced to the wholesale/retail trade sector had the largest share in the outstanding amount of credit to non-property, non-financial enterprises at 22.8 per cent, followed by the hotels and restaurants sector at 19.5 per cent. Credit to these sectors was 3.3 per cent and 3 per cent lower on an annual basis, respectively, at end-March 2011.

Loans outstanding to Irish SMEs by resident credit institutions totalled €46.2 billion at end-March 2011, excluding loans to the financial intermediation sector. This figure represented a net decline of €864 million during the first quarter of 2011 and €6.9 billion over the year ending March 2011, equivalent to an annual decline of 12.2 per cent. Gross new lending⁵ to non-financial SME counterparties totalled €794 million during the first quarter of 2011, bringing total new lending to these counterparties to just over €3 billion in the last year. New lending to non-financial SMEs during the first quarter of 2011 was concentrated in real estate activities (€202 million), agriculture (€141 million), and wholesale/retail trade (€113 million).

Interest rates on new loans to NFCs, agreed by Irish resident credit institutions, have broadly increased in recent months. In the case of NFC loans up to €1 million, the weighted average interest rate recorded an increase of 1.29 percentage points between May 2010 and May 2011. The increase in new business rates on NFC loans over €1 million has been much more moderate and the weighted average interest rate was just 23 basis points higher in May 2011 than in the same month last year. Overall, the margin between these lending rates and the interest rates paid on deposits has increased over the last year. Developments in interest rate margins are discussed further in Box 1.

⁵ Gross new lending is defined as the drawdown of new facilities, and excludes any restructuring or re-negotiation of existing facilities.

Chart 15: Interest Rate on New NFC Loans



Source: Retail Interest Rate Statistics, Central Bank of Ireland.

Multinational NFC Developments

Recourse by resident multinational NFCs, both foreign and Irish-owned, to market-based funding as an alternative to bank funding was flat during Q1 2011. In Q1 2011 net debt issuances were €101 million, this compares with net issuances of €307 million during Q1 2010. While the value of listed equity, namely shares, remained steady during Q1 2011, the value of multinational NFCs' equities rebounded in April 2011, by €3.6 billion, largely reflecting improvements in the market valuation of a number of multinational NFCs which have recently established their global headquarters in Ireland. There were also positive market valuation effects for Irish-owned multinational NFCs.

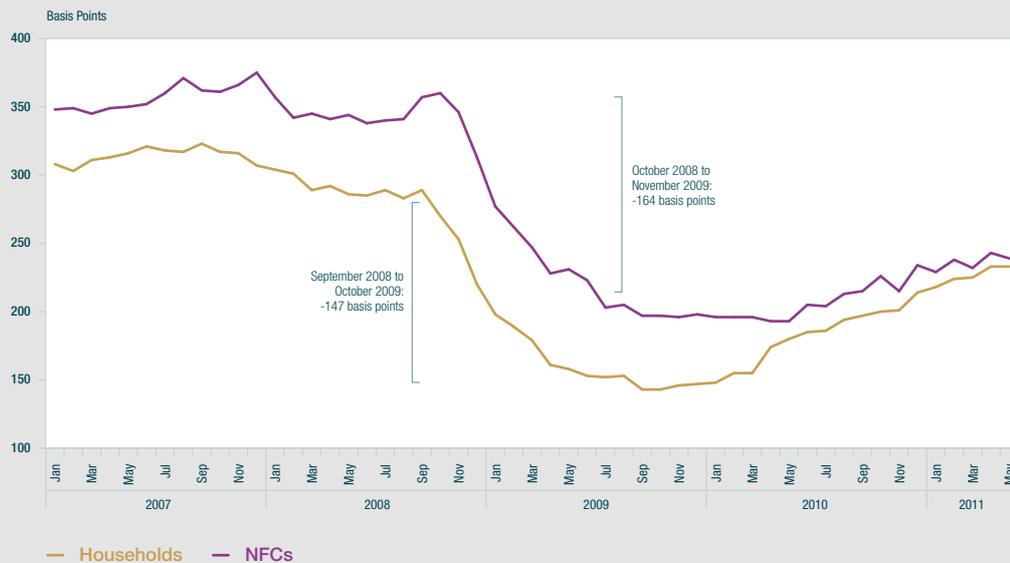
The trend of foreign investment by Irish-owned multinational NFCs continued during Q1 2011, where €5.4 billion was invested abroad over the quarter. This increase in foreign assets was largely offset by valuation and other changes of over €9 billion, which resulted in the total stock of foreign investment declining from €244 billion at end-December 2010 to €240 billion at end-March 2011. Meanwhile, foreign-owned multinational NFCs continued to reinvest in their Irish operations, with inflows amounting to €15.9 billion during the first quarter of 2011. These inflows comprised reinvested earnings of €6.4 billion and inter-company borrowings of €10 billion. The volume of foreign investment in Irish-based foreign-owned multinational NFCs was €295.9 billion at end-March.

Investment income earned abroad by Irish-owned multinational NFCs declined by €1.1 billion to €3 billion during Q1 2011 compared with Q4 2010. A significant portion of direct investment income earned is attributable to multinational NFCs who have established their headquarters in Ireland and the remaining income is related to foreign earnings of Irish-owned multinational NFCs. Investment income paid abroad to foreign direct investors, increased by €3 billion from Q4 2010 to €10.3 billion during Q1 2011. This reflects the type of investment by foreign-owned multinational NFCs in Ireland, particularly in the pharmaceutical and high-technology sectors, where high rates of return are generated. Internal Central Bank estimates indicate these rates of return to be around 5.6 per cent. In contrast, the equivalent rate of return on direct investment abroad by Irish multinational NFCs, primarily in more traditional industries, is much more modest at around 1.2 per cent.

Box 1: Developments in Retail Interest Rate Margins

Retail interest rates on outstanding loans to households and non-financial corporations (NFCs) in Ireland have been increasing steadily since early 2010, following a period of very significant decline from October 2008 to end-2009. The weighted average interest rate on loans to households⁶ reached 6.01 per cent in September 2008, just before the start of the rate-cutting cycle. This rate then fell to 3.35 per cent in January 2010, but has been increasing since then, averaging 4.08 per cent in May 2011. Similarly, the weighted average interest rate on NFC loans fell by approximately 360 basis points between October 2008 and December 2009, to 3.17 per cent. While still low by recent standards, this rate has risen by approximately 55 basis points since then. Interest rates on outstanding deposits also fell sharply as the official interest rates were reduced, although the magnitude of their decline was not as severe as in the case of loans. Deposit interest rates continued declining into 2010 and the early months of 2011. Between October 2008 and March 2011, the weighted average interest rate on household deposits recorded a fall of 148 basis points, while interest rates on NFC deposits fell by just under 200 basis points over the same period. These rates have only begun to register modest increases in the last two months, following the ECB rate increase in April 2011.

Box Chart 1: Irish Interest Rate Margins



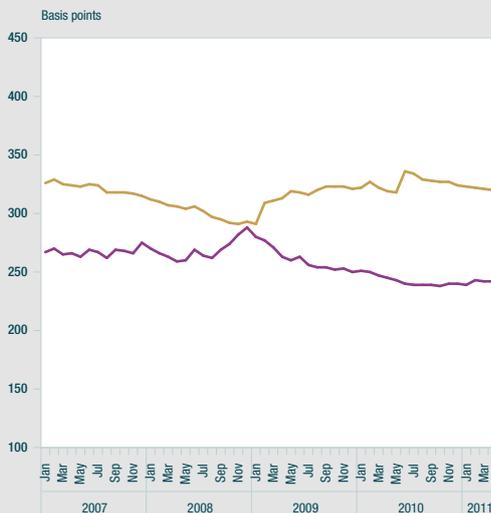
Source: Retail Interest Rate Statistics, Central Bank of Ireland.

These developments are reflected in the upward trend in the margin between the average interest rate the credit institutions earn on their outstanding loans and the average interest rate they pay on their outstanding deposits. As shown in Box Chart 1 above, this improvement in margins follows a period of significant tightening from late 2008 to end-2009. The margin between average rates for household lending and deposits has risen strongly since then, increasing from a low of 143 basis points in October 2009 to 233 basis points in May 2011. The margin between NFC loan and deposit rates has also increased over the last 18 months, from 196 basis points in November 2009 to 239 basis points in May 2011.

⁶ The average interest rate on loans to households is a weighted average of the interest rates charged on loans for house purchase, loans for consumption and loans for other purposes.

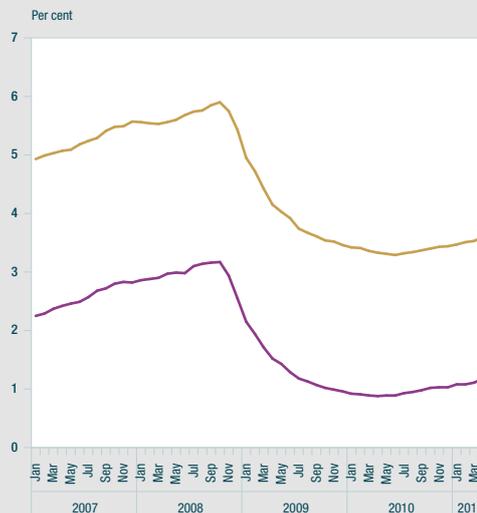
Box 1: Developments in Retail Interest Rate Margins

Margins in the euro area overall have remained relatively stable since end-2008. Interest rates on loans to both households and NFCs fell considerably between October 2008 and the early months of 2010; however, the magnitude of decline was significantly smaller than in the case of interest rates on loans issued by Irish resident credit institutions. Furthermore, the fall in lending rates was more or less matched by a fall in deposit rates, in terms of both the timing and magnitude of decline. This is particularly evident in the case of interest rates on NFC loans and deposits, which are shown in Box Chart 2B below. Finally, in contrast to the Irish case, where deposit rates continued to decline throughout 2010 and into the early months of 2011, euro area household and NFC deposit interest rates began to increase gradually from April 2010, when interest rates on loans also started to increase, keeping the margins broadly stable.

Box Chart 2A: Euro Area Interest Rate Margins

— Households — NFCs

Source: ECB Statistical Data Warehouse.

Box Chart 2B: Interest Rates on Euro Area NFC Loans and Deposits

— Loans — Deposits

Source: ECB Statistical Data Warehouse.

As mentioned above, interest rates on loans fell more sharply from October 2008 in Ireland than in the euro area overall. This was particularly evident in the case of interest rates on household loans, which fell by 266 basis points in Ireland, compared to a fall of 131 basis points in the euro area. In Ireland, loans for house purchase have accounted for approximately 78 per cent of all outstanding loans to households from 2008 onwards. Recent data show that 85 per cent of the value of outstanding mortgage loans on Irish resident credit institutions' balance sheets are accounted for by standard variable rate mortgages and tracker mortgages,⁷ and this is likely to account for the divergence in average mortgage interest rates in Ireland and the euro area from end-2008, as shown in Box Chart 3. Tracker mortgages account for 53 per cent of the value of outstanding mortgages in Ireland, and interest rates on these loans fell significantly from October 2008, as the ECB cut its main refinancing rate by a cumulative 325 basis points. These reductions in official interest rates were also passed on to standard variable rate mortgage holders, although not necessarily in full. The average mortgage interest rate in Ireland increased gradually in 2010 and early 2011, rising sharply in April 2011, following the ECB rate increase. Given the large share of floating rate mortgages in total outstanding mortgage loans in Ireland, and the anticipation of further increases in official interest rates, it is likely that the upward trend will continue in the weighted average interest rate on loans for house purchase.

⁷ These figures on the share of floating rate mortgages in total outstanding mortgages relate to end-March 2011. These are new data and were first collected with reference to end-December 2010.

Box 1: Developments in Retail Interest Rate Margins

Box Chart 3: Mortgage Interest Rates

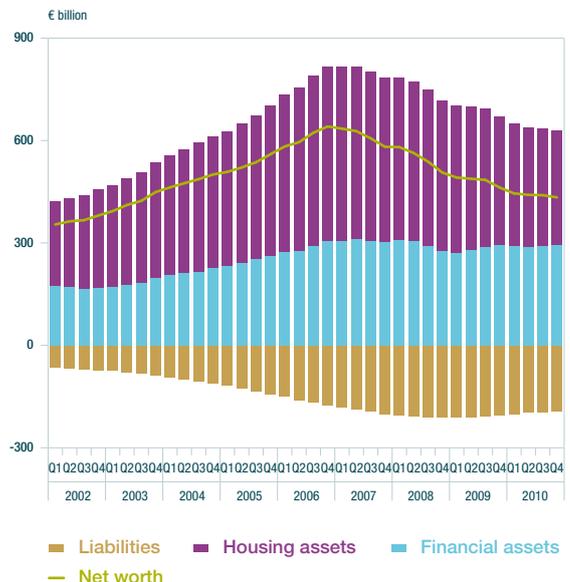


Sources: Retail Interest Rate Statistics, Central Bank of Ireland, and ECB Statistical Data Warehouse.

Households

Household net worth (the difference between total assets⁸ and liabilities) fell to €433 billion or €96,616 per capita in Q4 2010. This represents a 1.5 per cent decline from the previous quarter. The reduction in household net worth during Q4 2010 was largely driven by the continued decline of housing asset values. The fall in housing assets was, however, offset in part by an increase in value of financial assets over the quarter, primarily insurance technical reserves⁹ and a reduction of household liabilities, as households continued to reduce the high debt levels incurred prior to the crisis. Households' liabilities fell to €194 billion in Q4 2010, a decline of nearly €18 billion from their peak in Q4 2008. The decline in net worth during Q4 2010 continues the downward trend that has been observed each quarter since Q1 2007. Overall, household net worth has fallen by 32 per cent since its peak in Q4 2006, largely due to declining housing assets which have fallen by 35 per cent over this period.

Chart 16: Household Assets, Liabilities and Net Worth



Sources: Quarterly Financial Accounts for Ireland, Central Bank of Ireland, and internal CBI estimates.

⁸ Total assets comprise financial and non-financial assets. Housing assets are used as a proxy for all non-financial assets. The Central Bank estimate of housing assets is based on the size and value of the housing stock.
⁹ Insurance technical reserves include life insurance policies and pension funds, and are very illiquid.

The financial transactions underlying these balance sheet positions are depicted in Chart 17, showing that Irish households have been net lenders since 2008 (i.e. financial asset transactions have been greater than liability transactions). The chart shows that the increase in net lending has been driven in part by household investment in financial assets, but also, more substantially, by a reduction in household liabilities. Since late 2009, households have been undergoing a period of deleveraging as they have sought to reduce high debt levels. Household debt repayments averaged €2.6 billion over the four quarters of 2010 with 98 per cent of these repayments being made on household loans. The high household net lending figures indicate that household saving continued to be high in Q4 2010.

Chart 17: Household Net Lending/Net Borrowing, Four-Quarter Moving Average



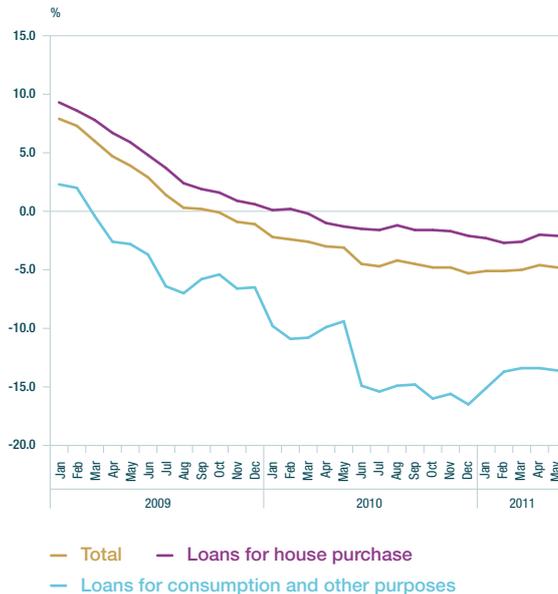
Source: Quarterly Financial Accounts for Ireland, Central Bank of Ireland.

Lending to Households by Irish Resident Credit Institutions

Loans to Irish households advanced by Irish resident credit institutions continued to decline, albeit at a slightly slower pace. The annual rate of change was minus 4.8 per cent, based on the average for the three months ending May 2011. The monthly net flow of loans to households averaged minus €468 million in these three months. By contrast, in the euro area, loans to households increased by an average rate of 3.4 per cent in the three months ending May.

Lending for the purpose of house purchase accounts for almost 80 per cent of all loans to households in Ireland and has continued to decline on an annual basis in recent months. The annual rate of change in loans for house purchase was minus 2.2 per cent, based on the average for the three months ending May 2011, while monthly net flows averaged minus €208 million during this three-month period. Meanwhile, lending for consumption and other purposes fell by 13.6 per cent, based on the average for the three months ending May, with the monthly net flow averaging minus €260 million. While the latest Bank Lending Survey data for Ireland show some increase in demand for mortgage lending during the second quarter of 2011, tighter credit standards were also reported in the case of mortgage lending, as well as an increase in interest margins. Participating institutions reported, however, that ongoing adjustments in preparation for the Basel III process were neutral regarding the changes in credit standards on loans to households.

Chart 18: Loans to Irish Households, Annual Change



Source: Money and Banking Statistics, Central Bank of Ireland.

Borrowing costs continue to increase for households. Interest rates on new mortgages with floating rates or up to one year initial rate fixation increased by 54 basis points over the last year, from a weighted average rate of 2.75 per cent in May 2010 to 3.29 per cent in May 2011. Interest rates on new mortgages fixed for more than one year increased by 60 basis points during the same period. The average rates of interest on outstanding mortgages have also increased in recent months. For mortgages with an original maturity of over five years, the weighted average interest rate has increased by 28 basis points since the end of 2010. New data published by the Central Bank show that floating rate mortgages¹⁰ accounted for 86 per cent of the outstanding amount of mortgage loans on-balance sheet at end-March 2011¹¹. As a result, the weighted average interest rate on outstanding mortgage loans is very sensitive to changes in variable mortgage interest rates. Tracker mortgages by themselves accounted for 53.5 per cent of

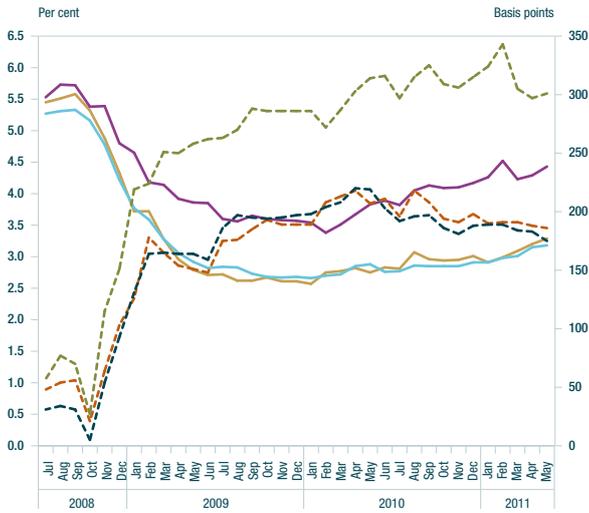
outstanding mortgage loans to Irish residents on the credit institutions' balance sheet at end-March. The weighted average interest rate on outstanding mortgages with an original maturity of over five years increased by 13 basis points in April alone, following the increase in the ECB main refinancing rate during that month.

Interest rates on consumer loans also continue to rise. The weighted average rate of interest on new consumer loans with floating rates or short initial rate fixation periods was 1.93 percentage points higher in May 2011 than in the same month a year previously. Rates on new consumer loans with longer initial rate fixation periods have also increased, although to a lesser extent. With regard to interest rates on outstanding consumer and other loans, those with an original maturity of less than one year have experienced a substantial increase of 2.11 percentage points between May 2010 and May 2011, bringing the weighted average to 9.33 per cent. The increases in rates on consumer loans with an original maturity of over five years have been relatively modest, rising by 13 basis points. These increases in rates on household loans have resulted in higher margins over household deposit rates. This is discussed further in Box 1.

¹⁰ Floating rate mortgages include standard variable rate, tracker rate, and mortgages with a fixed rate up to one year, in line with international practice.

¹¹ Data also indicate that the share of floating rate mortgages in the outstanding amount of securitised mortgages is broadly similar, at 84 per cent.

Chart 19: Mortgage Interest Rates to Households



- New floating rate mortgages, interest rate (LHS)
- New mortgages, fixed for over one year, interest rate (LHS)
- Outstanding mortgages, interest rate (LHS)
- New mortgages, fixed for over one year, margin over 3 month Euribor (RHS)
- New floating rate mortgages, margin over 3 month Euribor (RHS)
- Outstanding mortgages, margin over 3 month Euribor (RHS)

Source: Retail Interest Rate Statistics, Central Bank of Ireland.

Developments in the International and Euro Area Economy

Overview

Global growth gathered renewed momentum in the first few months of this year, driven increasingly by a strengthening of private final demand, although the pattern of growth still remained uneven across regions. More recently, however, adverse supply-side shocks from higher commodity prices and from the Japanese earthquake and tsunami have had a dampening effect on the expansion, but such effects are expected to ease in the second half of this year. Looking ahead, strong growth in emerging and developing economies, and accommodative monetary policies should support the global recovery. However, the expansion is expected to remain unbalanced, constrained in advanced economies by high unemployment levels, ongoing private sector balance sheet adjustments and the gradual withdrawal of fiscal support. Uncertainty surrounding the outlook remains elevated, with renewed financial market strains reflecting concerns about the depth of fiscal challenges in the euro area and US, as well as weaker than expected US activity. In early July, market sentiment deteriorated further, largely reflecting unresolved sovereign bond market risks in the euro area and fears of more wide-spread contagion to larger euro area countries. Other downside risks relate to further possible increases in energy prices, protectionist pressures, and the possibility of a disorderly correction in global imbalances. Commodity prices have driven headline inflation rates upwards in recent months, while core rates remain fairly contained, despite creeping up across a number of economies.

Global economic activity has continued to expand at a robust pace, proceeding along a more self-sustained path. However, the latest indicators suggest that the momentum in global economic growth has recently moderated somewhat from the buoyant growth rates recorded at the start of this year. Trade and production dynamics eased at the turn of the second quarter and more recent survey data signal a weakening of the global economic expansion at the end of the first half of the year. Regional differences with respect to the cyclical position persist with advanced economies lagging behind the more vigorous activity seen in emerging economies. In more detail, the US recovery has been weaker than expected, with private consumption very subdued, while in Japan, the impact of the earthquake and tsunami has led to a sharp contraction in economic activity in the short term, but the global repercussions are expected to be relatively limited. Following

strong growth at the start of the year, a continued expansion of economic activity is expected in the euro area in the second quarter, albeit at a slower pace, as temporary factors supporting growth at the beginning of the year recede. Looking through this short-term volatility, the underlying momentum of economic activity in the euro area remains positive and is expected to continue to recover gradually further.

Prospects for the global recovery have remained broadly unchanged, albeit with some offsetting changes across advanced economies. The latest global growth forecasts from the IMF in June have been revised down only marginally from April, by 0.1 per cent to 4.3 per cent for this year, while projected growth remains unchanged at 4.5 per cent for 2012. However, with Japan hit by the devastating earthquake and tsunami and economic growth disappointing in the US,

Table 1: Changes in Real GDP in Selected Economies

	Percentage Change		
	2010	2011 ^f	2012 ^f
Global	5.1	4.3	4.5
United States	2.9	2.5	2.7
Japan	4.0	-0.7	2.9
Euro Area	1.8	2.0	1.7
United Kingdom	1.3	1.5	2.3
Emerging/Developing Economies	7.4	6.6	6.4
China	10.3	9.6	9.5

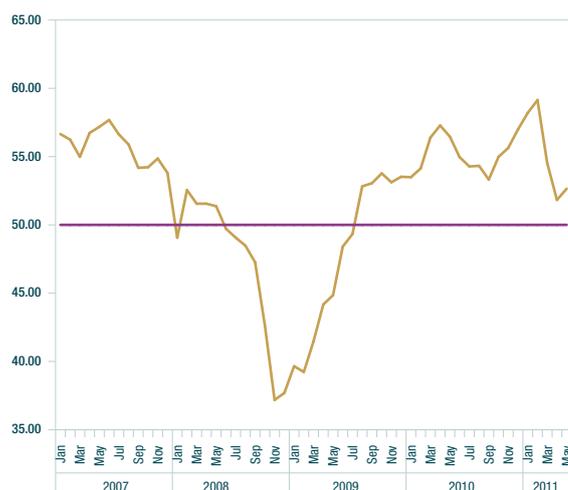
^f Forecast

Source: IMF World Economic Outlook Update, June 2011.

real GDP has been revised downwards this year in both economies while, in contrast, stronger than expected growth in the euro area at the start of the year has seen its forecast for this year increase by 0.4 per cent. Economic activity in emerging and developing economies has evolved broadly as expected, with growth moderating slightly this year, partly due to monetary policy tightening.

Uncertainty regarding the global growth outlook remains elevated, with risks tilted to the downside. Market confidence in the euro area periphery deteriorated further, in particular in early July, with contagion spreading to some larger euro area countries, while risks also arise from persistent fiscal and financial sector imbalances in other advanced economies, in particular the large near-term fiscal adjustment that is necessary in the US, against the background of a still-fragile recovery. Concerns of a possible setback to the US recovery have mounted recently, while, at the same time, overheating pressures continue to prevail in some key emerging economies – notwithstanding efforts to restrain growth by engaging in more restrictive monetary and fiscal policies. Furthermore, geopolitical tensions in the Middle East and North Africa (MENA) region constitute an upside risk to oil prices, while the possibility of a disorderly unwinding of global imbalances remains an ongoing concern. On the positive side, the recovery is becoming more self-sustained, with recent strengthening in private sector activity pointing to some upside potential.

Headline inflation has generally increased across the world over the past number of months, driven primarily by commodity prices. Consumer inflation rates of other goods and services have also crept up across a number of advanced economies, although they still remain fairly contained. Among developing and emerging economies, inflation pressures have become increasingly broad-based, reflecting increasing capacity constraints and the higher weight of commodities in their consumption basket. Monetary policy tightening is well underway in many emerging economies as a result.

Chart 1: Global PMI Output Index

Source: Markit PMI.

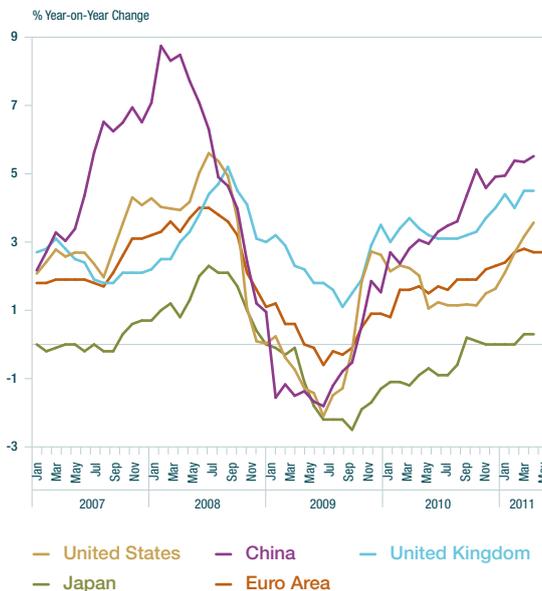
Note: For PMI indicators, above 50 represents expansion, below 50 represents contraction.

Table 2: Contribution of expenditure components to quarter-on-quarter variation in real GDP

	2010			2011
	Q2	Q3	Q4	Q1
Private Consumption	0.1	0.1	0.2	0.2
Government Consumption	0.0	0.0	0.0	0.2
Fixed Investment	0.4	0.0	0.0	0.4
Inventories	0.2	0.1	-0.1	0.0
Exports	1.6	0.7	0.7	0.8
Imports	-1.5	-0.5	-0.5	-0.7
GDP	1.0	0.4	0.3	0.8

Source: Eurostat.

Chart 2: Inflation in the Major Economies



Source: Reuters EcoWin.

Section 1: Euro Area

Economic Growth – Recent Developments

In the first quarter of this year, euro area real GDP growth increased strongly to 0.8 per cent quarter-on-quarter, following a 0.3 per cent increase in the fourth quarter of 2010. As Table 2 outlines, the expansion over the first quarter was mainly driven by domestic demand, and, in particular, fixed investment, while there were positive contributions also from household and government consumption. The strong increase in fixed investment was supported by strong construction activity, due to very supportive weather conditions, which triggered some

catch up activity following the harsh weather conditions of the fourth quarter of 2010. Meanwhile, the recovery in private consumption remains rather muted, reflecting subdued developments in real disposable household income. A two speed recovery is still evident in the euro area, with growth very strong in economies such as Germany, France, and the Netherlands, but much weaker in the peripheral countries.

The latest available indicators point towards a continued positive underlying momentum of economic activity in the euro area in the second quarter of 2011. However, growth is expected to slow down following the exceptionally strong first quarter, as temporary factors mainly related to weather recede. Moreover, the expansion in private consumption is expected to remain at a moderate pace while, against the backdrop of the current global economic soft patch, exports may have eased over the second quarter.

With respect to labour market developments, the unemployment rate has stabilised at 9.9 per cent since March, falling from a peak of 10.2 at the end of last year, while employment growth was static in the first quarter. Similar to economic growth, unemployment rates vary significantly across the euro area. In May, the Netherlands recorded the lowest unemployment rate at 4.2 per cent while Spain recorded the highest rate at 20.9 per cent. Over the projection horizon, the unemployment rate is expected to remain stable in 2011 and to then decline slowly thereafter, although remaining above 9 per cent over this period.

Chart 3: Euro Area GDP Growth

Source: Reuters EcoWin.

Chart 4: Euro Area Confidence Indicators

Source: Reuters EcoWin.

Economic Growth – Outlook

Growth in the euro area is expected to continue at a gradual and uneven pace. The latest ECB staff projections anticipate real GDP to expand by between 1.5 and 2.3 per cent in 2011, followed by growth of between 0.6 and 2.8 per cent in 2012. These are in line with the latest IMF GDP projections for the euro area of 2.0 per cent in 2011 and 1.7 per cent in 2012, contained in their June World Economic Outlook update. While the pace of export growth is expected to weaken, net trade should continue to make a positive contribution to growth as the euro area benefits from the ongoing improvement in the global economy. Private sector domestic demand is also expected to support growth as it benefits from the accommodative monetary policy stance and financial system improvements.

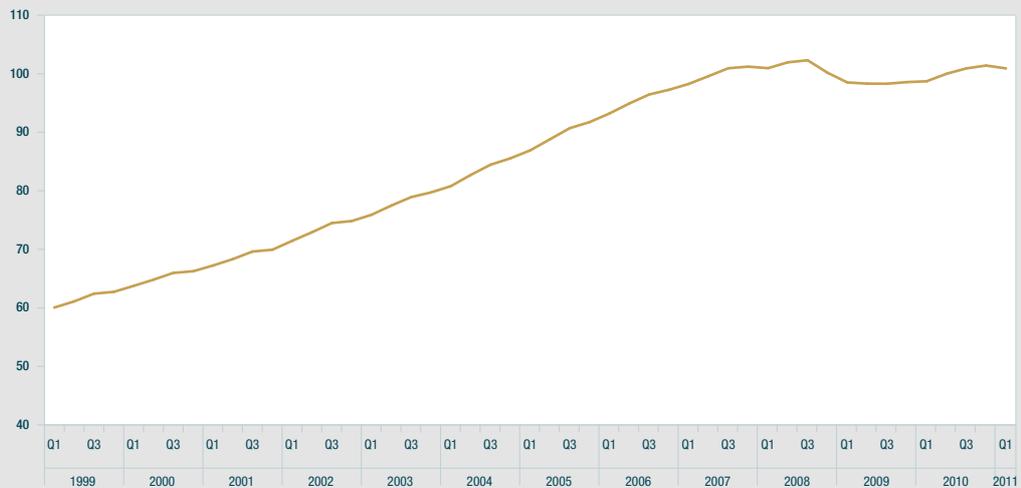
Looking at the core economies, Germany is expected to remain the driver of the recovery in the euro area, with the IMF forecasting growth of 3.2 per cent in 2011 and 2.0 per cent in 2012. These slower growth rates, compared with 3.5 per cent recorded in 2010, are due to the withdrawal of fiscal support and the slowdown in external demand growth. French GDP growth is expected to be relatively modest in 2011 due to these same reasons, with the IMF forecasting growth of 2.1 per cent in 2011 and 1.9 per cent in 2012. Regarding Italy, the recovery is expected to remain weak as a result of long-standing competitiveness problems and the planned fiscal consolidation. The IMF is projecting growth of 1.0 per cent in 2011 and 1.3 per cent in 2012. Recovery in the Spanish economy is also expected to be weak as the rebalancing of the economy after the housing and credit booms continues, with the IMF projecting growth of 0.8 per cent in 2011 and 1.6 per cent in 2012.

Risks to the outlook relate to ongoing tensions in the sovereign debt markets, the possibility that energy prices may increase further causing a bigger drag on private consumption, and the risk that the current soft patch in the global economy could become prolonged, affecting the euro area's exports.

Box 1: Recent Developments in Euro Area Housing Markets *By Linda Dungan¹*

House prices in the euro area had been on a consistent upward path until the financial crisis in 2008 abruptly disrupted the market. In 2009, house prices in the region declined by 2.9 per cent, the first decline recorded since the beginning of EMU, with contractions recorded in almost every member state. Prices for the region as a whole resumed their upward trend in 2010, increasing by 1.9 per cent on average. The positive momentum was carried through into the first quarter of 2011, although at a slightly more moderate pace, when prices increased 2.2 per cent from the first quarter of 2010.

Chart A: Euro Area Residential Property Price Index (2007=100)



Source: ECB Statistical Data Warehouse.

However, these recent increases in average house prices mask significant heterogeneity across euro area countries. On one side of the spectrum, are countries that have recorded sizeable declines in property values. In many cases this followed a residential property boom in the preceding years, with Ireland, Spain, Greece, Estonia and Slovakia experiencing the sharpest declines. House prices in the Netherlands have also declined, albeit at a more moderate rate. A second grouping is comprised of countries that have recorded modest house price increases over the past two years taken together, including Germany, Austria, Finland, Belgium and Portugal. Property markets in these countries have been generally characterised by more moderate price developments since the beginning of EMU.

¹ The author is an economist in the Bank's Monetary Policy and International Relations Department.

Box 1: Recent Developments in Euro Area Housing Markets *By Linda Dungan¹***Residential Property Prices² – Year-on-year % change**

	Average 1999-2008	2009	2010	2010				2011
				Q1	Q2	Q3	Q4	Q1
Belgium	7.8	-0.3	5.4	3.8	5.9	5.8	5.9	:
Germany	-0.2	0.6	2.3	:	:	:	:	:
Estonia	20.4 ^a	-35.9	0.1	-8.1	-0.6	6.2	4.0	2.2
Ireland	9.8	-13.7	-15.5	-18.9	-17.0	-14.8	-10.8	:
Greece	8.7 ^b	-3.7	-4.6	-1.8	-4.7	-5.2	-6.9	-5.0
Spain	10.8 ^b	-6.7	-2.0	-2.9	-0.9	-2.2	-1.9	-4.1
France	9.4	-7.1	6.3	1.4	6.1	8.4	9.5	8.7
Italy	5.6	-0.4	0.1		-0.2 ^f		0.4 ^f	:
Cyprus	:	:	:	:	:	:	:	:
Luxembourg	9.4	:	:	:	:	:	:	:
Malta	7.1	-5.0	1.1	4.5	0.5	1.5	-2.0	-2.6
Netherlands	7.6	-3.3	-2.0	-4.4	-2.0	-0.6	-1.0	-1.2
Austria	1.9 ^c	3.6	5.7	5.7	5.3	5.0	6.8	3.9
Portugal	3.4	0.4	1.8	1.3	1.6	2.9	1.6	:
Slovenia	13.9 ^d	-8.2	2.8	1.2	4.2	4.6	1.5	1.1
Slovakia	20.9 ^e	-11.1	-3.9	-8.3	-3.7	-1.3	-2.1	-2.5
Finland	4.2 ^e	-0.3	8.7	11.4	10.3	8.0	5.2	4.0
Euro Area	5.6	-2.9	1.9	0.2	1.7	2.7	2.9	2.2

Source: ECB Statistical Data Warehouse & National Sources.

2 a: average 2005-2008; b: from national data; c: average 2001-2008; d: average 2004-2008; e: average 2006-2008; f: bi-annual data.

Developments in France over the past two years do not easily fit into either of these categories. Following a decline of more than 7 per cent in 2009, house prices increased by 6.3 per cent last year and have been increasing at an even higher rate in recent quarters. As France accounts for more than one fifth of the euro area's weighted average, the strong recovery in the French market has been a significant driver of the rise in euro area prices. Property prices in France have been supported by particularly strong demand in the greater Paris area, as well as the limited supply of housing nationwide that has been held back by regulatory barriers to new construction. Tax incentives and government support schemes that encourage property investment have also been supporting prices.

While euro area house prices have resumed their upward trend, recent price increases are still modest compared to the gains recorded between 1999 and 2008. Developments in the euro area as a whole are likely to continue to mask divergent trends in individual Member States, where the outlook for property markets will depend on country specific conditions.

Inflation – Recent Developments

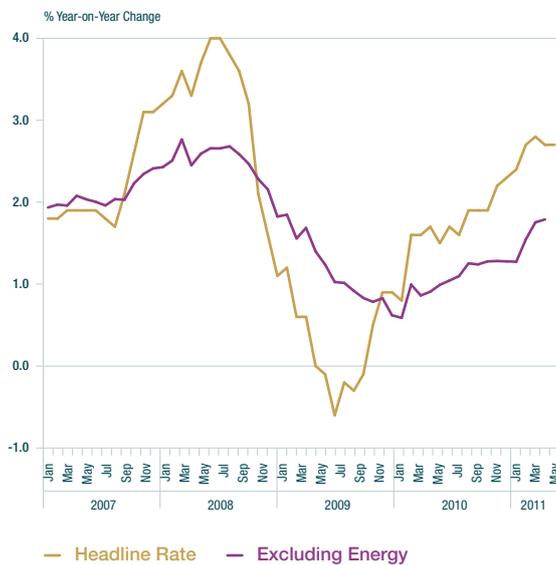
Euro area headline HICP inflation increased by 2.7 per cent year-on-year in June, unchanged from the previous month. Rising food and energy prices have played a significant role in the acceleration of the headline rate since the second half of 2010. Core inflation has also gradually increased in recent months, with

HICP inflation excluding energy increasing from 1.3 per cent in February to 1.8 per cent in June. Services price inflation has increased steadily in 2011, registering 2.0 per cent in June, stemming from a combination of higher input costs, strengthening demand and rises in administered prices. Non-energy industrial goods inflation, which has been quite volatile

in 2011 due to harmonisation in the statistical treatment of seasonal products across countries³, remained unchanged at 1.0 per cent in May. In addition, industrial producer prices have stabilised in recent months but remain elevated. Meanwhile, cost pressures in the early stages of the production process also remain high, despite decreasing sharply in recent months, in line with the moderation of oil prices. Domestic price pressures, in the form of labour costs, increased somewhat in the first quarter reflecting improving conditions in the labour market.

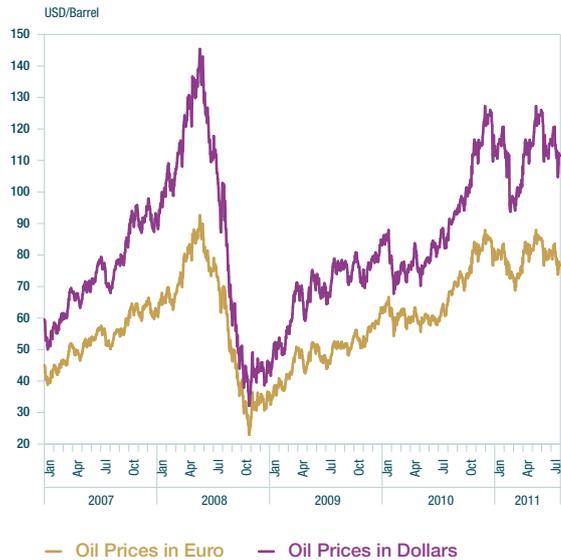
In the euro area, the ECB raised the interest rate on its main refinancing operations by 25bps in April and July this year, to now stand at 1.50 per cent, in light of upside risks to price stability. These measures were aimed at ensuring that recent price developments do not give rise to broad-based inflationary pressures over the medium term.

Chart 5: Euro Area Inflation



Source: Reuters EcoWin.

Chart 6: Oil Prices – Brent Crude



Source: Reuters EcoWin.

Oil and other Commodity Prices

Brent crude oil was trading at \$114 per barrel in early July, around 20 per cent higher than the beginning of the year. Crude oil prices have been particularly volatile in recent months. A two-year high of \$127 per barrel reached in April was followed by an abrupt downward correction in early May, leaving Brent crude oil \$16 per barrel lower in the space of week. Since then, downward pressure on prices has arisen from weaker than expected economic data, confirmation that Saudi Arabia will increase production and the International Energy Agency’s plan to release 60 million barrels per day from its strategic reserves for only the third time in its history.

Non-energy commodity prices have declined on average in recent months following a prolonged period of upward price movements. Food prices have stabilised with the United Nations Food and Agriculture index increasing marginally in June, when a sharp increase in sugar was offset by slight declines in cereals and oils/fats. The prices of base metals have also generally declined recently, led by copper tin and nickel, following higher levels of risk

3 Refer to <http://www.ecb.int/pub/pdf/mobu/mb201104en.pdf> ECB monthly bulletin, April 2011, for more information on this.

Table 3: Contributions to percent change in real US GDP, annualised growth rates

	2010				2011
	Q1	Q2	Q3	Q4	Q1
Personal Consumption	1.3	1.5	1.7	2.8	1.5
Government Consumption	-0.3	0.8	0.8	-0.3	-1.2
Fixed Investment	0.4	2.1	0.2	0.8	0.2
Inventories	2.6	0.8	1.6	-3.4	1.3
Exports	1.3	1.1	0.8	1.1	1.0
Imports	-1.6	-4.6	-2.5	2.2	-0.8
GDP	3.7	1.7	2.6	3.1	1.9

Source: BEA.

aversion from market participants due in part to weak economic data and the rekindling of the sovereign debt crisis within the euro area.

Inflation – Outlook

Headline inflation is likely to remain above 2 per cent for the remainder of the year before moderating thereafter as the impact of food and energy price movements from late last year fall out of the measurement. Eurosystem staff projections are for headline inflation of between 2.5 and 2.7 per cent in 2011 and between 1.1 and 2.3 per cent in 2012. The balance of risks remain on the upside and are concentrated around the likelihood of higher than expected energy prices, higher indirect taxes and administered prices and stronger domestic price pressures.

Section 2 – External Environment

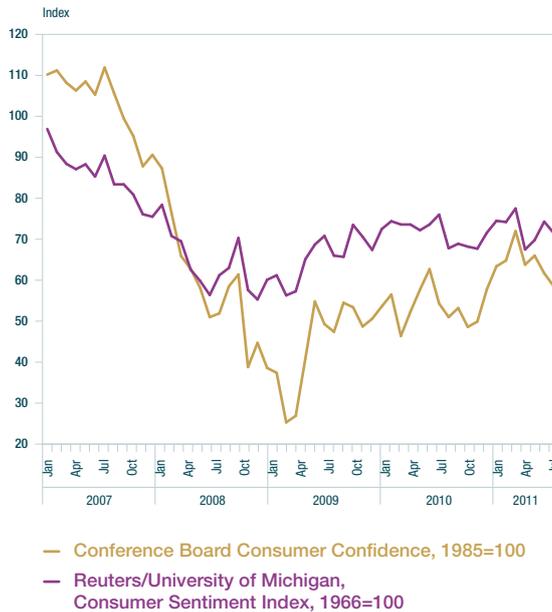
United States

The third estimate of real GDP, released by the Bureau of Economic Analysis (BEA), indicated that US growth decelerated in the first quarter of 2011 to a quarterly rate of 0.5 per cent (1.9 per cent in annualised terms), down from 0.8 per cent in the final three months of 2010. While personal consumption, investment and net trade continued to contribute positively towards growth, the pace of expansion was more muted across all these components of aggregate demand in the first quarter of 2011.

Government spending has become a more significant drag on growth, as authorities at the state and federal level have cut back on spending, while inventories resumed their positive contribution to growth following a sharp contraction in the previous quarter. The IMF is forecasting growth of 2.5 per cent for 2011 as a whole, and 2.7 per cent in 2012.

Looking ahead, the economic recovery is expected to continue at a moderate pace, though somewhat more slowly than had been expected earlier in the year. Survey-based indicators and available hard data point to modest growth in the second quarter of 2011. Consumer confidence continued to deteriorate and personal consumption expenditure was weak, as consumers were affected by higher gasoline and grocery prices, as well as a depressed housing sector. The employment situation has also weighed on consumption, as the unemployment rate remains stubbornly high and the participation rate is persistently below average. The manufacturing sector has also been experiencing a soft patch recently, with industrial production flattening out as tornadoes disrupted activities in southern states, and as the output of motor vehicles and parts was hampered by supply chain disruptions following the earthquake in Japan. Manufacturing is likely to pick up in the second half of 2011 as the impact of these temporary factors dissipates.

Chart 7: US Consumer Confidence



Source: Reuters EcoWin.

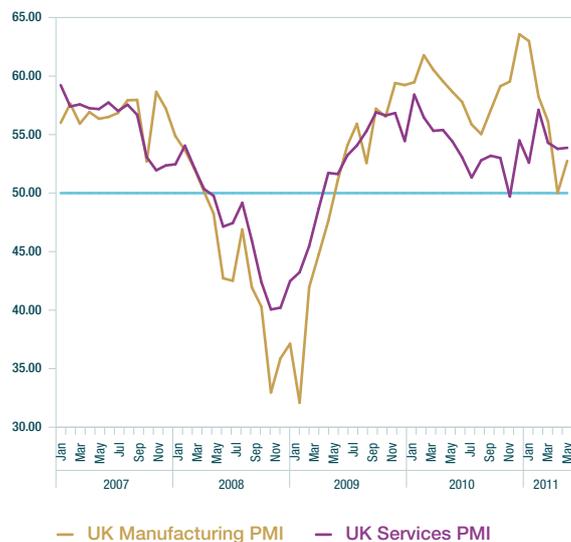
Consumer prices picked up in the first half of 2011, mainly as a result of higher commodity and import prices, as well as supply chain disruptions, but the Federal Reserve's Federal Open Market Committee (FOMC) anticipates these temporary effects will soon subside, and that longer-term inflation expectations have remained stable. The FOMC maintained the target range for the federal funds rate at the historically low level of zero to 0.25 per cent at its meeting in June and noted that economic conditions "are likely to warrant exceptionally low levels for the federal funds rate for an extended period". The FOMC completed its purchases of \$600 billion of longer-term Treasury securities by end-June, in line with the programme announced in November 2010.

United Kingdom

The UK recovery is continuing at a slow pace. Following a 0.5 per cent decline in the fourth quarter of 2010, real GDP rebounded in the first quarter of 2011, expanding by 0.5 per cent. Net trade was the overwhelming driver of GDP in the first quarter, contributing a record 1.7 per cent, with exporters taking advantage of sterling depreciation and the stronger international economy. At the same time, real consumer spending acted as a drag on the economy, contracting by 0.6 per cent, as real household incomes fell due to rising inflation accompanied by weak wage growth.

The outlook for the UK economy remains uncertain. The atypical events of the royal wedding and the accompanying extra bank holiday coupled with the earthquake in Japan have made the interpretation of recent economic indicators more problematic. However, overall they do suggest weaker growth for the second quarter, with June PMI data (both manufacturing and services) including new export orders signalling softer growth, while the latest household consumption data have also been poor. In their June World Economic Outlook update, the IMF downgraded their 2011 GDP forecast for the UK by 0.2 percentage points to 1.5 per cent. Exports and business investment are expected to be the main drivers of economic growth in the near term. Nevertheless, the current sterling weakness, low interest rates and strong corporate financial surpluses should provide an underlying support to the economy. These components will need to counteract the substantial fall in household consumption, which is expected to remain a drag on the economy in the near term, together with the decline in government spending resulting from the considerable fiscal consolidation. Official and international forecasts expect GDP to accelerate next year, with the latest IMF forecast predicting GDP growth of 2.3 per cent in 2012.

Chart 8: PMI Indicators for the UK



Source: Markit PMI.

Note: For PMI indicators, above 50 represents expansion, below 50 represents contraction.

Annual CPI inflation remains at the elevated level of 4.2 per cent in June despite easing somewhat from the previous month, reflecting high energy prices, the January VAT increase and higher import prices as a result of the sterling depreciation. The Bank of England expects the temporary effect of these factors to remain in the near term, projecting inflation to probably peak above 5 per cent before moderating as the impact of the temporary factors dissipates. Core inflation eased in June to 2.8 per cent. At present, market expectations are that the Bank of England will not raise interest rates in the near term.

Emerging EU Member States

The economic recovery in the seven emerging non-euro area EU member states continues to broaden out, with domestic demand set to gradually become the main driver of economic growth. Cross-country differences remain significant, with Bulgaria, Lithuania and Poland showing particularly strong growth in the first half of 2011, while some other countries are taking longer to return to their pre-crisis growth levels. Uncertainty remains high in the region and risks to the outlook include further increases in commodity prices, the dampening effect of additional fiscal consolidation measures in

order to comply with recommendations under each country's Excessive Deficit Procedure, and continuing deleveraging in the banking sector that could limit credit growth. Inflation rates have continued to rise in recent months, as commodity prices remain at elevated levels. The higher weight of food and energy prices in Emerging EU Member States consumption baskets makes inflation especially sensitive to commodity price movements. Increases in indirect taxes and administered prices also contributed to higher inflation rates in a number of countries.

Japan

Real GDP fell by an annualised 3.5 per cent in the first quarter of 2011, while quarter-on-quarter it declined 0.9 per cent, marking the second consecutive quarter of contraction, and thus confirming the Japanese economy is back in recession. The economy is continuing to suffer from supply chain disruptions and power shortages caused by the March earthquake and tsunami, and this, combined with the deterioration in consumer sentiment is keeping uncertainty surrounding the outlook for the Japanese economy elevated. The Japanese government is initially spending 4 trillion yen (\$50 billion) to clean up from the disaster, although it estimates that the economic damage caused could be up to 25 trillion yen.

Overall, economic conditions have declined in the second quarter. Recent statistical releases suggest Japan's economy continues to face downward pressure with both manufacturing and households badly affected. Following the earthquake, production and exports declined sharply while domestic private demand also weakened considerably. The Bank of Japan's quarterly Tankan survey of business sentiment, released in early July, points to a sharp decline in sentiment among Japanese manufacturers, although it does signal that the Japanese economy will rebound, with companies forecast to increase hiring and investment as demand picks up after the earthquake. Exports declined at a slower pace in May 2011, but still fell significantly by 10.3 per cent from the previous year. Furthermore, exporters

have been adversely affected by the strength of the yen, which has gained significantly on the dollar in recent months. The IMF has projected real GDP growth to rise from -0.7 per cent this year to 2.9 per cent in 2012.

With respect to price developments, deflation has been easing recently with Japan's annual CPI inflation excluding food and energy at -0.1 per cent in April, up from -0.7 per cent in March. The Bank of Japan left its target range for the uncollateralised overnight call rate unchanged at 0.0 per cent to 0.1 per cent at its meeting on 14th June 2011.

Emerging Asia

Emerging Asia generally continued to experience strong economic growth in the first quarter of 2011. Economic activity in the region has been supported by strong domestic and external demand. High food and commodity prices in addition to sustained domestic demand have increased inflationary pressures in the first few months of 2011. Monetary policy is increasingly in evidence to counteract inflationary pressures by way of interest rate hikes and quantitative measures.

In China, real GDP expanded by 9.7 per cent year-on-year in the first quarter of 2011 driven primarily by strong consumption spending. Based on IMF forecasts, growth is expected to remain around 9.5 per cent in 2011 and 2012. The People's Bank of China raised its reserve ratios to a record 21.5 per cent in June after inflation accelerated to 5.5 per cent in May, its highest peak in almost three years. Inflation in China is mainly being driven by increasing food prices, and the People's Bank of China has now raised benchmark interest rates on five occasions since October 2010 (the benchmark one-year lending rate currently stands at 6.56 per cent with the benchmark deposit rate at 3.50 per cent).

Meanwhile, real GDP growth in India eased somewhat in the first quarter of 2011 to 7.7 per cent year-on-year, following growth of 9.2 per cent in the final quarter of 2010. For 2011 as a whole, the IMF has forecast growth of 8.2 per cent, declining to 7.8 per cent in 2012. In terms of price developments, India's wholesale price index increased by 9.1 per cent in May, up from 8.7 per cent in April. Overall, high oil prices pose the biggest risk to both growth and inflation. Owing to persistent inflationary pressures, the Reserve Bank of India increased its key policy rate by 25 basis points bringing the repo rate to 7.5 per cent in June 2011.

Box 2: A Study of Irish Trade with China *By Neill Killeen⁴ and Diarmaid Smyth⁵*

The expansion of global trade in recent years has been driven to a significant extent by the growth of a number of large emerging economies including the BRIC countries (Brazil, Russia, India and China⁶). From an Irish perspective, trade with China dominates our BRIC trade. While our overall trade with the BRIC economies has increased from 2.2 per cent of total trade, or €3.1 billion, in 2000 to just under 5 per cent, or €6.7 billion, in 2010 (Chart A), approximately 80 per cent of this latter figure represents trade with China. In overall terms, the rapid growth in Irish exports and imports to and from China has resulted in it becoming Ireland's seventh largest trading partner.

⁴ The author is a Research Assistant in the Bank's Monetary Policy and International Relations Division.

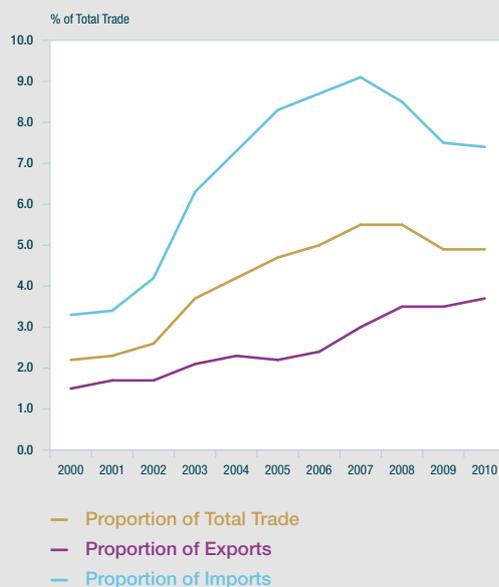
⁵ The author is an Economist in the Bank's Economic Analysis and Research Division.

⁶ For the purposes of this Box, we include China, Hong Kong and Macao as one block. Irish trade data is from the Central Statistics Office (CSO). EU and international trade data is taken from the Eurostat External trade database. The authors are solely responsible for the content and any errors therein.

Box 2: A Study of Irish Trade with China *By Neill Killeen⁴ and Diarmaid Smyth⁵*

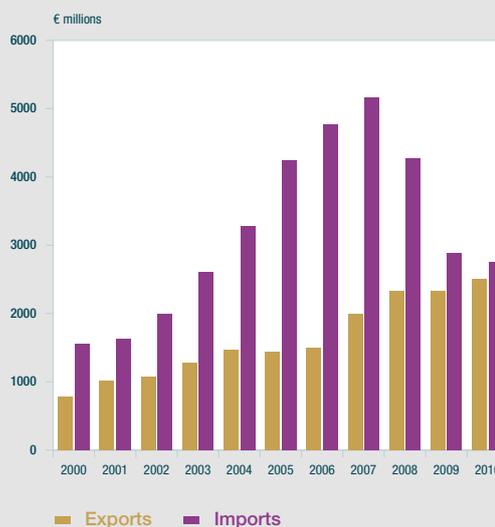
The recent trend in Irish merchandise trade with China is depicted in Chart B. As can be seen, exports have increased steadily over the period 2000 to 2010, albeit from a low base, and have trebled in value to €2.5 billion over the period. Merchandise imports, meanwhile, expanded very rapidly between 2000 and 2007, reaching a peak of €5.2 billion – which implied a merchandise trade deficit with China of €3.2 billion in 2007 – before declining sharply over the period 2008 to 2010 in line with the downturn in the domestic economy. Currently, Irish merchandise imports from China stand at around €2.8 billion, which means that the merchandise trade deficit has closed to around €250 million.

On the merchandise export side, two areas dominate, namely the broad Chemicals sector (SITC 5) and Machinery and Equipment sector (SITC 7), with the latter also one of the largest import categories alongside Miscellaneous Manufacturing (SITC 8), which includes clothing and footwear. A more detailed analysis of the composition of trade with China will be provided in Quarterly Bulletin 04, 2011.

Chart A: Merchandise Trade with BRICs

— Proportion of Total Trade
— Proportion of Exports
— Proportion of Imports

Sources: Central Statistics Office (CSO) and authors' calculations.

Chart B: Merchandise Trade with China

■ Exports ■ Imports

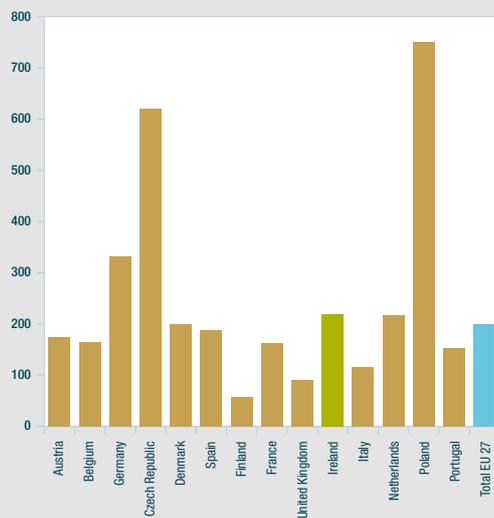
Sources: Central Statistics Office (CSO) and authors' calculations.

Services exports to China have also grown rapidly in recent years, again from a low base. While Ireland has a small merchandise trade deficit with China, on the services side a sizable surplus exists. In 2009, the latest year for which data are available, services exports to China amounted to €1.6 billion (2.4 per cent of total services exports), with imports significantly lower at €0.4 billion (0.5 per cent of total service imports). Due to data confidentiality reasons, it is difficult to identify precisely the main service export categories. However, the data show significant exports in the area of “operational leasing”, including the leasing of transport equipment, which accounts for about half of all Irish service exports to China. Other important export categories include business and financial services exports.

Box 2: A Study of Irish Trade with China By Neill Killeen⁴ and Diarmaid Smyth⁵

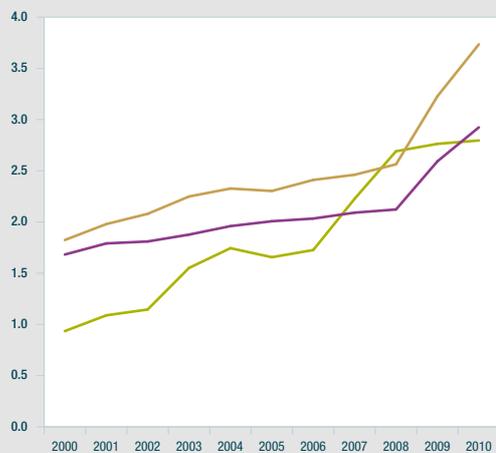
A comparison of Ireland's export growth to China with that of other European countries provides some insight into the success of the economy in penetrating this large and rapidly expanding market over the past decade. At the start of the period under review in 2000, approximately 1 per cent of total Irish merchandise exports were bound for China as compared with an EU average of 1.8 per cent. Over the subsequent decade, our merchandise export growth was broadly in line with the performance of the EU as a whole, up 220 per cent against 200 per cent for the EU (Chart C). By 2010, Irish merchandise exports to China accounted for 2.8 per cent of our total compared to the EU figure of 3.7 per cent (Chart D).

Chart C: Value of Merchandise Exports to China: Growth rates of selected countries 2000-2010



Sources: Eurostat and authors' calculations.

Chart D: Irish vs EU Merchandise Export Shares with China



- Total EU 27 Merchandise Exports to China as a percentage of Total EU 27 Merchandise Exports
- EU 26 Merchandise Exports (excluding Germany) to China as a percentage of Total Merchandise Exports
- Irish Merchandise Exports to China as a percentage of Total Merchandise Exports

Sources: Reuters EcoWin, Eurostat and authors' calculations.

In a European context, Malta, Germany and Finland have the highest percentage of total merchandise exports to China with 8.4 per cent of the total exports for Malta, 6.2 per cent for Germany and 5.9 per cent for Finland. The sizable share of merchandise exports bound for China from Germany reflects the strong Chinese demand for machinery and transport equipment goods and specifically general industrial machinery, electrical machinery, apparatus, appliances and road vehicles. In Finland's case, the main export categories include machinery specialised for particular industries (paper mill and pulp mill machinery), electrical machinery, telecommunications and general industrial machinery. Interestingly, the value of exports from Finland to China has fallen almost seven fold since 2007 in the telecommunications SITC⁷ category.

Given the size of the German economy, its success in penetrating Chinese markets has a significant effect on the overall share of China in EU exports. This is reflected in Chart D which shows overall EU merchandise exports to China over the past decade and also the same trend when Germany is excluded. As can be seen, when Germany is excluded from the analysis Ireland's export performance relative to the rest of the EU improves noticeably.

7 Standard International Trade Classification, Rev. 3.

Section 3: Financial Markets

Financial market developments during the second quarter of 2011 were dominated by concerns over the outlook for the global economy and a further intensification of stress in some euro area sovereign bond markets. This led to a general preference on the part of investors for safe-haven assets and to a sell-off in more risky assets. An easing of concerns over euro area sovereign debt markets during the second half of June gave rise to some improvement in market sentiment. This improvement proved to be short-lived, however, with a further intensification of concerns over euro area sovereign debt markets in early July. Growing expectations for an interest rate increase by the ECB in July were also an important driver of market developments during the quarter.

Equity Markets

Equity market indices generally declined during the second quarter of 2011 before recovering somewhat during the second half of June. The decline was largely due to concerns about the strength of the global economic recovery following some disappointing economic data releases from the US, as well as a re-intensification of stress in some euro area sovereign debt markets. While economic data releases from the euro area were still seen as positive, they did not provide a positive boost to investor sentiment. Ongoing tensions in North Africa and the Middle East as well as production chain disruption arising from the earthquake in Japan put further downward pressure on investor sentiment in equity markets. The rebound in global equity markets during the second half of June was largely due to a reduction in concerns over euro area sovereign debt markets amid growing investor confidence that authorities would be able to reach an agreement to extend further loans to Greece. Renewed concerns over euro area sovereign debt gave rise to fresh equity market volatility in early July.

Chart 9: International Share Price Indices
(end - December 2006 = 100)



Source: Reuters EcoWin.

Foreign Exchange Developments

The euro experienced some volatility during the second quarter of 2011 but ended the quarter at a higher level against both the US dollar and sterling. This followed a general appreciating trend during the first quarter. The appreciation during the second quarter was primarily due to growing expectations of interest rate increases on the part of the ECB while, at the same time, comments from officials at the US Federal Reserve and the Bank of England led market participants to push back their expectations of monetary policy tightening in those jurisdictions. Volatility arose from growing concerns over stress in euro area sovereign debt markets and investor fears of a possible sovereign debt restructuring by Greece. A further escalation in the euro area sovereign debt crisis in early July put downward pressure on the euro.

Sovereign Debt Markets

Yields on AAA-rated sovereign debt generally declined during the second quarter of 2011, amid growing concerns on the part of market participants about prospects for the global economy and a further intensification of stress in some euro area sovereign debt markets. Ongoing tensions in northern Africa and the Middle East also put some upward pressure on the prices of safe-haven assets including

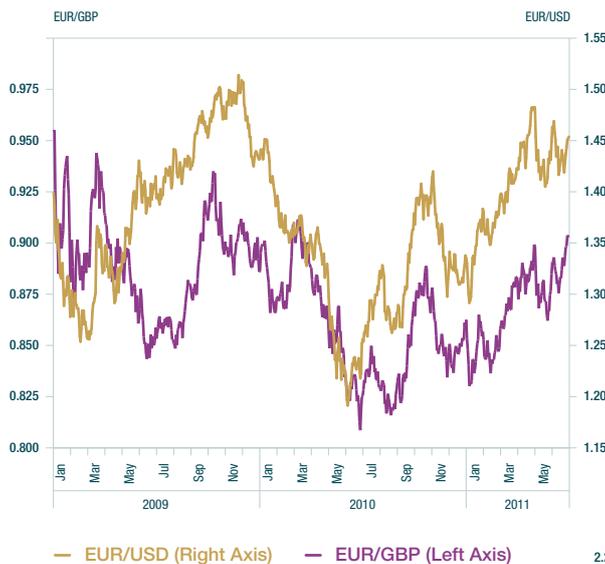
highly-rated sovereign bonds. Irish yields spreads over Germany fell somewhat in early April, following the release of well received stress test results on Irish banks, but subsequently started to increase again as investor fears over a possible restructuring of Greek sovereign debt gained momentum. These fears put strong upward pressure on the yields of a number of euro area sovereigns, with bond yield spreads over Germany for these countries rising considerably. Tensions abated during the second half of June, with bond yield spreads over Germany declining somewhat, as international authorities reached an agreement to extend a second tranche of lending to Greece. Moody's announcement of a credit rating downgrade for Portugal and Ireland and political disagreement over austerity measures in Italy gave rise to renewed spread widening in early July.

Chart 11: Selected Euro Area 10-Year Sovereign Bond Yield Spreads over Germany (bps)



Source: Thomson Reuters Datastream.

Chart 10: Euro Exchange Rates

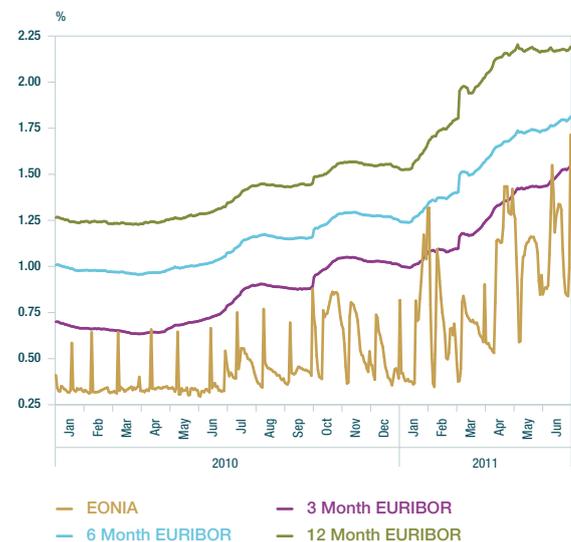


Source: Reuters EcoWin.

Money Markets

Unsecured euro area money market interest rates increased during the second quarter of 2011, reflecting a 25 basis point increase in key ECB interest rates in April and expectations of a further 25 basis point increase in July. At the same time, volatility in money market rates increased, especially at the overnight maturity, while volumes traded at this maturity decreased. The announcement by the ECB of a 25 basis points increase in official interest rates put further upward pressure on money market rates at the start of the third quarter.

Chart 12: Selected Euro Area Money Market Interest Rates



Source: Reuters EcoWin.

Recent Economic Research Publications

The recently published fourth edition of the Research Bulletin of the Central Bank of Ireland highlights the recent economic research conducted by Bank staff. Some of the research themes recently examined include credit demand, mortgage distress, wage and price dynamics, unemployment and forecasting methods. In terms of research technical papers, eight were produced in 2010 and, to date this year, nine have been written. The non technical summaries for all of these papers are available at the following link <http://www.centralbank.ie/publications/Pages/ResearchTechnicalPapers.aspx>

The Bank has also launched, in April 2011, a new Economic Letters series. The series, which is modelled on similar publications released by some of the regional members of the US Federal Reserve system, will comprise short notes on particular domestic economic considerations. Using standard economic approaches, relevant policy issues pertinent to the Irish economy will be addressed in a concise and accessible manner. To date we have released 4 letters and they are available at the following link. <http://www.centralbank.ie/publications/Pages/EconomicLetters.aspx>

We also publish a number of less technical articles in the Quarterly Bulletin which can be accessed at the following link. <http://www.centralbank.ie/publications/Pages/QuarterlyBulletinArticles.aspx>

Many of these articles cover statistical issues reflecting an increase in the range of data released over the last year or so. The Central Bank website has recently been overhauled and one can use the RSS feed associated with the site to get timely notification of any new publication in terms of research technical papers, economic letters or quarterly bulletin articles.

The Research Bulletin also provides a listing of recent and forthcoming publications by Bank staff in peer reviewed external journals and books. There has been a substantial increase in output by staff at the bank in terms of publications in peer-reviewed scholarly outlets.

A paper co-authored by one of our research staff, Martina Lawless, has received the Czech National Bank Economic Research Award 2011. The paper was entitled "Downward Nominal and Real Wage Rigidity: Survey Evidence from European Firms" and was co-authored with colleagues from the ESCB. This article has been published in the Scandinavian Journal of Economics.

In May of this year, the Bank hosted the away meeting of the Heads of Research of the ESCB in Dublin. Central Bank staff also organised the Irish Economic Association meeting in April 2011, which was held in Limerick.

Signed Articles

The articles in this section are in the series of signed articles on monetary and general economic topics introduced in the autumn 1969 issue of the Bank's Bulletin. Any views expressed in these articles are not necessarily those held by the Bank and are the personal responsibility of the author.

The Rise and Fall of Sectoral Net Wealth in Ireland

Mary Cussen and Gillian Phelan*

Abstract

The loss in wealth precipitated by the latest financial crisis and economic recession has been substantial. Our paper estimates that Irish wealth has declined by 1.8 times GDP since Q3 2008. Much of the wealth lost has been due to a substantial decline in the value of real and financial assets. The household sector has suffered the severest decline, reflecting the rapid fall in house prices, to date. Our paper also finds that since the financial crisis began institutional sectors have markedly altered their behaviour in response to the changing economic environment. Households and the financial sector have been undergoing a process of deleveraging since late 2009, as they reduce debt levels. In contrast, the Government sector became a net borrower from Q2 2008 onwards, as a result of the worsening economic environment.

* The authors are Economist and Deputy Head of Department, respectively in the Bank's Statistics Department. The views expressed are solely the views of the authors and are not necessarily those held by the Central Bank of Ireland or the European System of Central Banks. The authors would like to acknowledge, with thanks, the helpful comments and suggestions of Patrick Honohan, Maurice McGuire, Joe McNeill, Gerard O'Reilly and Kieran McQuinn. They would also like to thank Donal Smith and Paul Anderson for statistical assistance.

1 Introduction

The wealth lost since the financial crisis began has been enormous. Total capitalisation of world stock markets almost halved during 2008, falling by approximately US \$30 trillion (Lin 2009). Furthermore, the world economy shrank in 2009 for the first time since World War II (IMF 2009). Ireland became the first euro area country to officially enter recession in September 2008. The decline in wealth in Ireland has been significant. The largest hit to personal wealth has come from the fall in the value of housing (Cussen and Phelan, 2010). Moreover, Government finances have deteriorated severely, while the banking sector has undergone huge structural change since the financial crisis began. This paper shows that in line with these developments there was substantial wealth destruction, arising from falls in the value of both financial and non-financial assets.

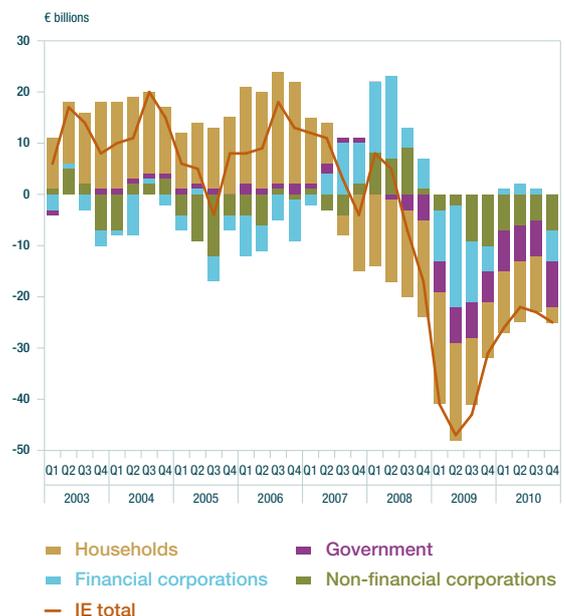
Examining the fall in net wealth is important for a number of reasons. Declining wealth can affect institutional sectors consumption and investment decisions, which can have an adverse impact on economic recovery. In addition, sectors may alter their borrowing and lending behaviour as a result of the changing economic environment. This in turn will have repercussions for other institutional sectors ability to finance their activities. The paper will be structured as follows; section 2 examines the decline in overall Irish wealth. Sections 3 and 4 analyse the impacts on wealth of valuation changes and financial flows, respectively. The relative contributions of valuation changes and savings to total net wealth are presented in section 5. The final section outlines conclusions.

2 The Fall in Total Irish Net Wealth

The decline in net wealth over time can be estimated by calculating the changes in domestic institutional sectors' balance sheets. Net financial wealth for all institutional sectors of the Irish economy can be obtained from the *Quarterly Financial Accounts*. These data are compiled in accordance with the principles laid down by the European System of Accounts (ESA 95) and are published on a quarterly

basis by the Central Bank of Ireland. As households and non-financial corporations hold a significant proportion of their wealth in the form of non-financial assets, estimates of housing assets and commercial property are added to net financial wealth so as to derive an overall approximation of total net wealth for these sectors. Chart 1 shows that overall Irish balance sheets have been declining since late 2008. In total, we estimate that net wealth has declined by €281 billion since Q3 2008, equivalent to approximately 1.8 times Irish GDP. This contrasts with an estimated loss in wealth of three times GDP during the Japanese recession of the 1990s and one year's GDP during the Great Depression for the United States (Koo 2008). Households have lost by far the largest amount of net wealth, accounting for nearly 50 per cent of the total wealth lost by Irish resident sectors since Q3 2008.

Chart 1: The Change in Irish Total Net Wealth, 4-quarter moving average



Sources: Quarterly Financial Accounts and internal calculations.

Changes in net wealth over a period can be sub-divided into two components – valuation changes in assets or liabilities held, and/or new savings generated, as outlined in Box 1. This paper examines the contribution of both declining asset values and savings to lower net wealth in sections 3 and 4, respectively.

Box 1: Determinants of Changes in Net Wealth

$$\text{Net Wealth} = \text{Financial Assets} + \text{Non-Financial Assets} - \text{Liabilities}$$

$$\Delta \text{ Net Wealth} = \Delta \text{ Value of Assets/Liabilities} + \Delta \text{ Savings}$$

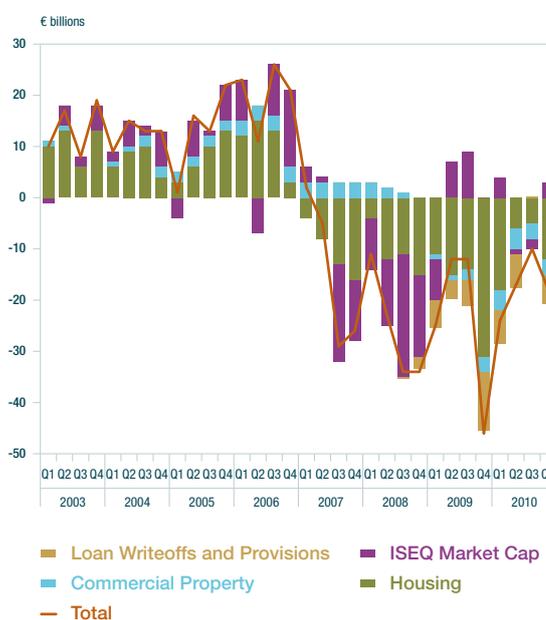
Value changes can be due to changes in the price of an asset/liability, exchange-rate changes or other changes such as classification changes

$$\Delta \text{ Savings} = \text{net lending/borrowing} + \text{investment in non-financial assets}$$

$$\text{Net lending/borrowing} = \text{transactions in financial assets} - \text{transactions in liabilities}$$

3 Valuation Changes

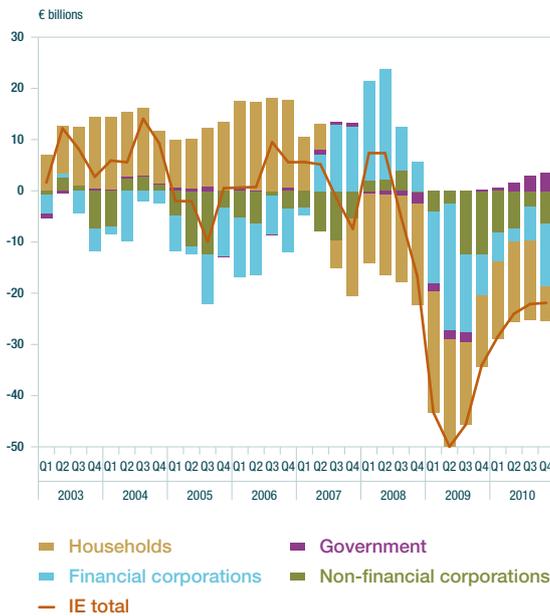
Severe financial crises can lead to large and prolonged declines in market asset values. Reinhart and Rogoff (2009) find in their analysis of historical financial crises, that real house prices fell, on average, by 35 per cent over a period of six years. They also find that real equity prices on average suffer much sharper declines of 55.9 per cent. Declines in equity prices however, are not as protracted, lasting 3.4 years on average. In the case of Ireland, house prices have fallen by 40 per cent so far since mid-2007 (CSO 2011b). Equity prices, on the other hand, fell by nearly 47 per cent between September 2007, when the international banking crisis started, and November 2010, when the ISEQ was at its lowest value, but have since rebounded slightly. Chart 2 depicts the Irish asset categories which have fallen most in value. In total, these assets have lost €321 billion since Q2 2007, with housing asset value suffering the severest declines.

Chart 2: The Decline in Value of Irish Assets

Sources: Quarterly Financial Accounts and internal calculations.

As Irish assets can be held by non-residents, it is more appropriate to calculate the change in the value of net wealth held by Irish resident sectors only. In overall terms, it is estimated that net wealth held by Irish residents has declined in value by €291 billion since Q3 2008. Chart 3 shows the extent to which these declines have been distributed across institutional sectors.

Chart 3: The Decline in Irish Total Net Wealth due to Valuation Effects, 4-quarter moving average



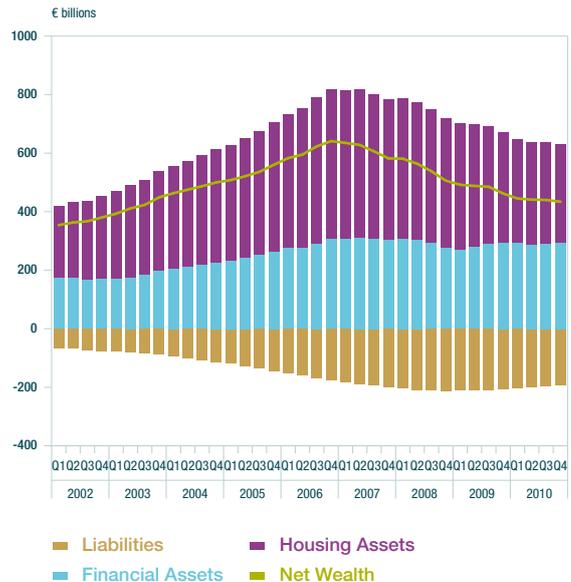
Sources: Quarterly Financial Accounts and internal calculations.

3.1 Households

Irish households have suffered by far the largest decline in net wealth, largely due to their exposure to the housing market. Households were also the first sector to experience a reduction in their net wealth, as house prices began to fall from Q1 2007 onwards². In total, the value of households' net wealth has fallen by 32 per cent from its peak in Q4 2006. Much of this reduction in wealth can be attributed to declines in the value of housing assets. In Q4 2006, housing assets formed 63 per cent of households total asset portfolio. House prices have, however, declined by nearly 40 per cent from their peak in mid-2007 (CSO 2011b), leading to a 35 per cent fall in the value of the total stock of housing assets. The value of households' assets were also adversely impacted, but to a lesser extent, by declines in the value of financial assets due to volatility in international stock markets as a result of the financial turmoil. Between Q1 2008 and Q1 2009, the value of households'

insurance technical reserves (ITRs)³ and quoted shares declined by 21 per cent and 60 per cent, respectively. However, as international stock markets started to recover, the value of ITRs rebounded by 14 per cent and quoted shares by 7 per cent, from Q2 2009 onwards.

Chart 4: The Household Balance Sheet: Assets, Liabilities and Net Wealth



Sources: Quarterly Financial Accounts and internal estimates.

Households' net wealth from Q1 2002 onwards is depicted in Chart 4. It can be seen that the net wealth of households has returned to Q3 2003 levels by Q4 2010. This fall in the net wealth of households is nearly identical to the fall in the value of housing assets, the stock of which is also back to the values that prevailed at Q3 2003. While households' financial assets have recovered some ground with positive growth in recent quarters, the net effect has been minimal, as the rise in asset values has been offset by an almost identical increase in liabilities.

As *Quarterly Financial Accounts* data only looks at sectoral wealth in aggregate, they do not give a comprehensive picture of the distributional effects of the fall in net wealth.

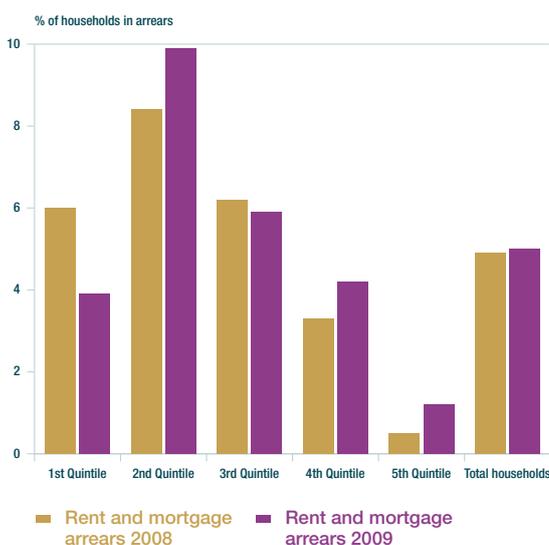
1 The improvement in Government's net wealth position in recent quarters reflects the fall in the market value of Irish Government bonds outstanding. The nominal value of the bonds outstanding provides a more accurate reflection of the debt outstanding.
 2 Our calculation on housing asset values are based on the ESRI/Permanent TSB house price index which shows that house prices were at their peak in Q4 2006. The recently released CSO residential property price index however, shows house prices peaking in April 2007.
 3 'Insurance technical reserves' include life assurance policies and pension funds.

In particular, the data cannot tell us the extent to which lower income groups' net wealth has been impacted by the recession and financial crisis. Some useful information may, however, be gained from *The Irish Longitudinal Study on Ageing* (TILDA) survey, which was conducted between October 2009 and February 2011 and which surveys Irish people aged 50 and over. O'Sullivan and Layte (2011) find using the results of this survey that people aged 50 and over on higher income levels have higher asset holdings. They find that the median value of owner occupied residential property, net of mortgage, for those in the lowest income quintile was €100,000, compared to €330,000 for those in the highest income quintile. In addition, they find that those with higher education levels report higher property values. Individuals with primary or no education reported a median property value of €170,000, while those with secondary or tertiary education valued their property at €200,000 or €300,000, respectively. Therefore, those with higher income levels and high educational levels are likely to have seen the biggest decrease in the value of their net wealth as property values declined. O'Sullivan and Layte also find that for each income quintile median net assets are positive, however they are extremely small for those in the lowest income quintile (c. €3,000). Those on lower income levels are, therefore, likely to have less savings or other financial assets which can be drawn on during old age.

The *Survey on Income and Living Conditions* (SILC) (CSO 2010) which provides data on rent and mortgage arrears, also provides some insights into how the impact of the economic downturn may have adversely affected different income groups. Chart 5 shows that 5 per cent of all households reported that they were in arrears with their rent or mortgage. The survey found however, that nearly 10 per cent of households in the second lowest income quintile reported they were in arrears. Therefore, although those in higher income quintiles may have lost more in terms of the value of their housing wealth, these results show that those in lower income quintiles are

most likely to be in arrears with their mortgage or rent, as they are likely to have less liquid assets at their disposal during times of financial stress. This is in line with findings by Foote, Gerardi and Willen (2008) which found that the probability of mortgage default increases if accompanied, at the same time, by cash-flow problems.

Chart 5: Rent and Mortgage Arrears by Income Quintile



Sources: SILC Survey 2010, CSO.

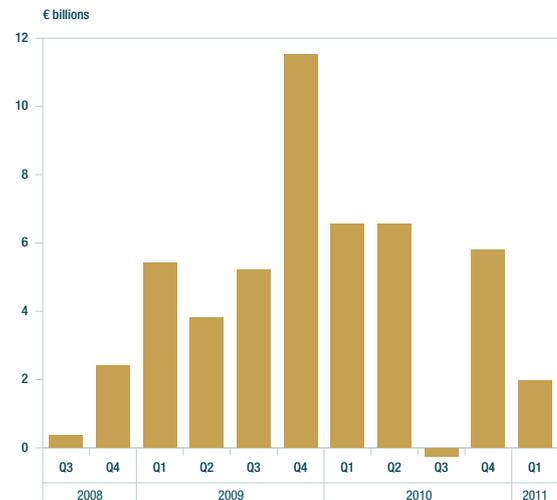
3.2 Financial Corporations

Financial corporations experienced the second largest decline in the value of their net wealth since the financial crisis began as shown in Chart 3⁴. Financial corporations comprises the Central Bank, money market funds, credit unions, credit institutions, other financial intermediaries, financial auxiliaries and insurance companies and pension funds. Though the money market fund and other financial intermediary sectors are very large in Ireland, most of their assets and liabilities are *vis-a-vis* non-residents. While, significant assets are held by the domestic insurance and pension fund sector, this sub-section will however, concentrate primarily on credit institutions where the largest structural changes have occurred.

⁴ It should be noted that as net wealth is equal to assets minus liabilities, declines in the value of securities and shares issued by financial corporations will increase the value of the sectors net wealth. Consequently, declines in financial corporations' asset values during the financial crisis were offset to some extent by reductions in the value of their liabilities.

In the years preceding the financial crisis, Irish banks built up a considerable exposure to the property market. Property-related lending, as a share of banks assets, had grown from less than 40 per cent before 2002 to over 60 per cent by 2006 (Honohan 2009). Moreover, from 2003 onwards, there was a distinct decline in residential loan appraisal quality and there was also a substantial increase in lending to property developers (Honohan et al. 2010). As property prices began to decline from early 2007 onwards, and Ireland entered recession in September 2008, it became evident that the over-exposure of bank lending to the property-related sector was a serious problem. In response to significant impaired loans on banks' balance sheets the National Asset Management Agency (NAMA) was established in January 2010. The purpose of NAMA was to remove impaired land and development loans from participating credit institutions⁵ balance sheets. These loans were exchanged for NAMA-issued securities, of which 95 per cent were Government guaranteed. Due to the significant impairment of the loans, NAMA has so far applied an average haircut on these loans of 58 per cent. As at the end of March 2011, Irish banks had transferred €72.3 billion of loans to NAMA, with the likelihood that a further €3.5 billion may yet be transferred (NAMA 2011). Chart 6 depicts loan write-downs, including those associated with the loans transferred to NAMA, and provisions for bad loans since Q3 2008. Since Q3 2008, the effect of write-downs and provisions on banks' loan books has been a reduction of almost €50 billion in the loan assets of banks. As most land and development loans have now been transferred to NAMA, it is likely that loan write-downs and provisions on development-related loans will be markedly smaller going forward, although further write-downs are likely for other loan categories.

Chart 6: Loan Write-Downs and Provisions for Bad Debts (transactions)



Sources: Money and Banking Statistics and internal calculations.

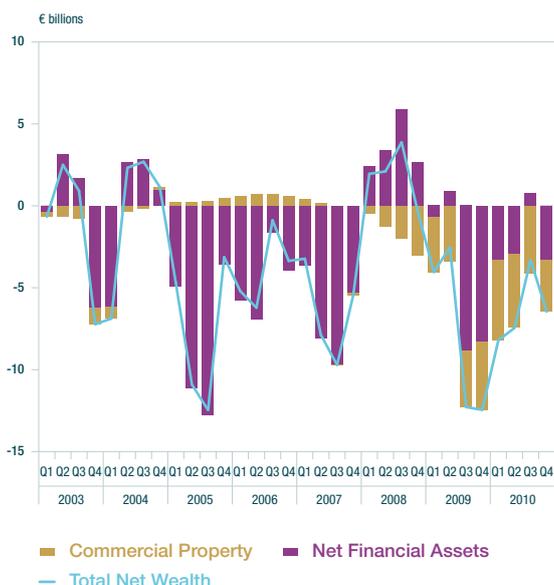
3.3 Non-Financial Corporations

Due to the large number of multinationals in the non-financial corporation sector in Ireland, changes in the net financial wealth of this sector can be heavily influenced by market entrants and exits. It can, therefore, be difficult to estimate the extent to which any net financial wealth decline is directly attributable to the recession and financial crisis. Chart 7 depicts the changes in the value of total net wealth of non-financial corporations, broken down by financial wealth and commercial property. As banks wrote-down the value of commercial property related loans from late 2008 onwards, this led to a decline in the value of non-financial corporations' liabilities. The fall in the value of non-financial corporations' commercial property assets was however, far less than the write-downs in loan liabilities. Commercial property prices began to decline in Q3 2007 as shown in Chart 7, *albeit* by a very small amount. As Ireland entered recession during 2008 however, the loss of value in commercial property increased substantially. Gros (2011) presents an alternative calculation for the value lost during the recession. This is

5 Allied Irish Bank, Bank of Ireland, Anglo Irish Bank, the Educational Building Society and Irish Nationwide Building Society.

based on estimates of the construction 'overhang' by calculating the amount by which construction exceeded its long-run average in Ireland. Using this methodology he calculates that the value of the oversupply amounted to around 52 per cent of GDP.

Chart 7: The Decline in Value of Non-Financial Corporate Net Wealth, 4-quarter moving average



Sources: Quarterly Financial Accounts and internal calculations.

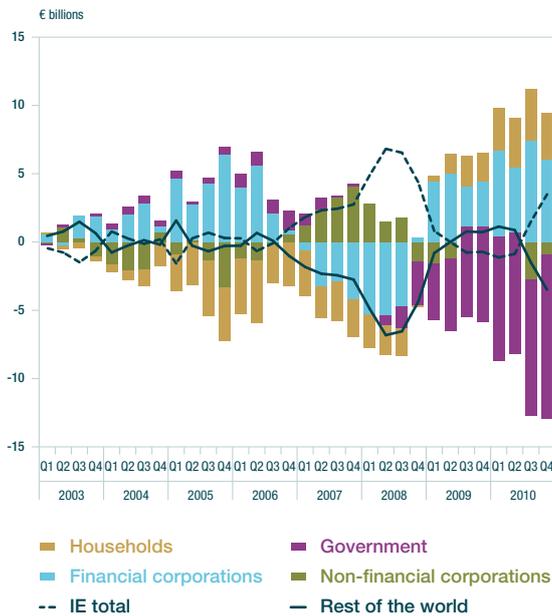
To conclude this section, declines in the value of net-financial wealth experienced in Ireland since the recession and financial crisis began, have not been homogenous across institutional sectors. Households have suffered, by far, the largest decline in net wealth reflecting their exposure to the housing market. Valuation changes are however not the only determinant of net wealth. Section 4 illustrates how trends in investment and borrowing have also influenced net wealth.

4 The Impact of Financial Flows on Wealth

In addition to valuation changes, financial transactions (or flows) also contribute to changes in net wealth. Institutional sectors markedly changed their behaviour in response to the financial crisis and subsequent recession, to adapt to the worsening economic environment. While the previous section examined the decline in Irish wealth due to valuation effects, this section looks at how the changes in behaviour of institutional sectors have impacted wealth. This is done by examining the flow of funds between sectors using net lending/borrowing data from Irish *Quarterly Financial Accounts*.

If a sector is a net lender, it is in overall terms, saving more than it is borrowing, thereby increasing its stock of financial assets. If a sector is a net borrower, the reverse applies. Net lending is, therefore, the difference between transactions in financial assets and transactions in liabilities. The net lending/borrowing of all sectors of the economy is summarised in Chart 8, where a positive figure indicates that a sector is a net lender, and *vice versa*. Overall, the sum of net lending/borrowing of all sectors will sum to zero, as for every lender there must be a corresponding borrower. However, flows can only contribute to an increase in overall net wealth, when domestic sectors have a positive net transactions balance with the rest of the world. Chart 8 shows that trends in net lending/borrowing for all sectors have altered significantly since the financial crisis intensified in Q3 2008. These changing trends are discussed in detail for each sector below, as well as their impact on net wealth and their counterparties.

Chart 8: Net Lending/Net Borrowing of All Sectors, 4-quarter moving average



Source: Quarterly Financial Accounts.

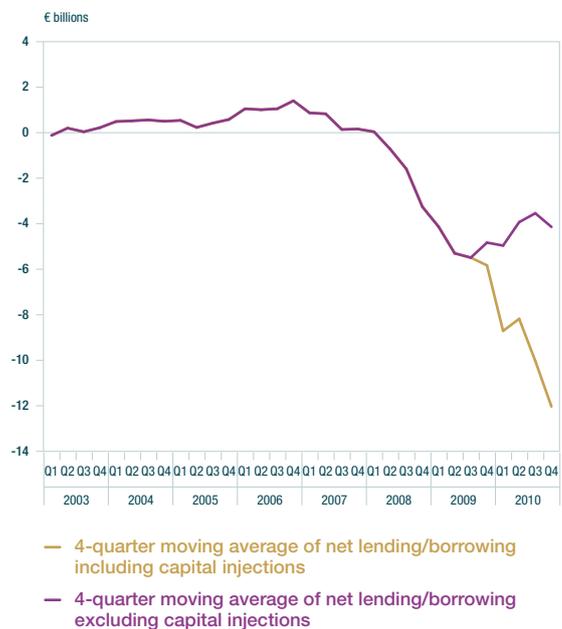
The reliance of Irish financial sectors on the rest of the world for funding, particularly in 2007 and 2008, is noteworthy. Essentially, domestic residents were accumulating financial liabilities with the rest of the world, largely for the purposes of investment in domestic non-financial assets (primarily property). These financial liabilities, largely in the form of bank borrowing, have not been impacted to a significant degree by valuation changes, in contrast to the non-financial assets they funded.

4.1 Government Net Lending/Borrowing

As the economic environment worsened, the Government sector moved from being a net lender to a net borrower in Q2 2008, as depicted in Chart 8. Lower tax revenues as a result of the recession, and the provision of capital transfers to stabilise the banking sector, have led to substantial increases in Government net borrowing in recent quarters. During 2009 and 2010, the State provided capital transfers totalling €4 billion and

€31.6 billion respectively to the distressed banks, further increasing Government borrowing requirements⁶. The impact of these capital transfers on net lending/borrowing is depicted below in Chart 9. Overall net borrowing by the Government totalled €23 billion in 2009 and €48 billion in 2010. This increased borrowing has led to the deterioration of Government wealth as outlined in section 2. Between Q4 2008 and Q4 2010 Government wealth has fallen from minus €23 billion to minus €78.7 billion.

Chart 9: Net Lending/Net Borrowing of Government, 4-quarter moving average



Sources: Quarterly Financial Accounts and internal calculations.

4.2 Households' Net Lending/Borrowing

Irish households had been net borrowers up to Q4 2008, increasing their debt levels each quarter, as depicted in Chart 8. Households' total borrowing levels peaked at €212 billion in Q4 2008, an increase of 220 per cent from Q1 2002. Households' borrowing was predominately used to finance housing purchases over this period. By Q4 2008, 73 per cent of outstanding loans related to housing purchases. The bursting of the

⁶ Capital injections into banks are treated in two distinct ways. Capital injections into Allied Irish Bank and Bank of Ireland totalling €10.7 billion are treated in the accounts as investments and therefore do not negatively impact net borrowing. However, capital injections into Anglo Irish Bank, EBS and Irish Nationwide are treated as capital transfers and therefore increase net borrowing.

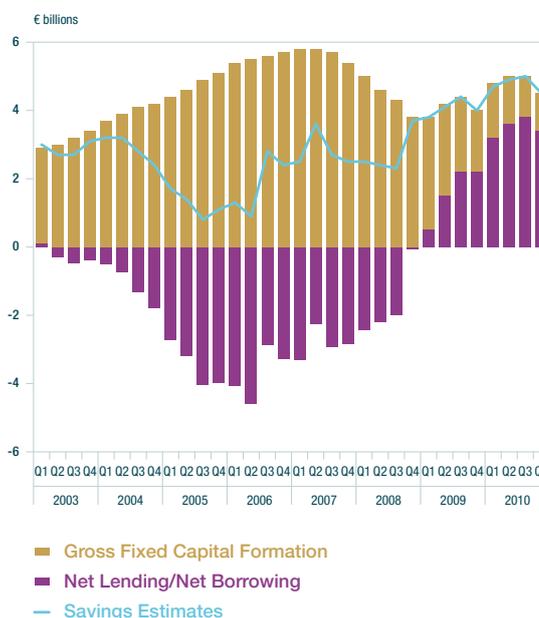
housing bubble and the financial crisis has, however, led to a deterioration in the value of household assets. Duffy (2010) estimates that 196,000 households were in negative equity by the end of 2010, equivalent to almost 30 per cent of mortgaged households in Ireland. Chart 10 shows that from Q1 2009 onwards households became net lenders, as transactions in liabilities declined. Furthermore, from late 2009 onwards households have been undergoing a process of deleveraging, as they reduce the high debt levels accumulated prior to the recession and financial crisis. This trend is in line with studies which have found that deleveraging has followed nearly every major financial crisis since the Second World War (Roxburgh et al., 2010). Estimates of household savings can be derived by adding investment in non-financial assets to net lending/borrowing. Chart 11 shows that household savings have been at historically very high levels since Q4 2008. The increased savings by households should over time contribute towards higher net wealth, as liabilities are reduced, assuming that they are not offset by further declines in asset values.

Chart 10: Net Lending/Net Borrowing of Irish Households, 4-quarter moving average



Sources: Quarterly Financial Accounts and internal calculations.

Chart 11: Estimates of Household Savings, 4-quarter moving average



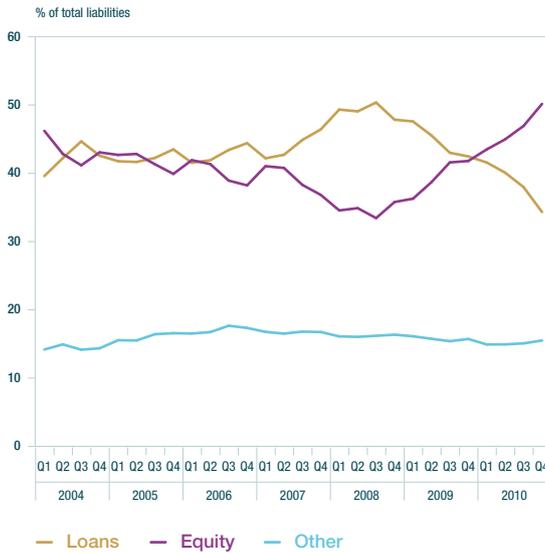
Sources: Quarterly Financial Accounts and CSO calculations.

4.3 Non-Financial Corporations' Net Lending/Borrowing

Non-financial corporations were net lenders between Q3 2009 and Q2 2010, as they reduced debt levels in the wake of the financial crisis. This trend was reversed however in late 2010 as they became net borrowers once more.

Chart 12 shows how non-financial corporations' funding sources have altered since the financial crisis and recession. From Q3 2004 onwards funding through loans tended to be proportionately higher than equity funding. However from Q3 2008 onwards the proportion of funding in the form of loans began to decline, and from Q1 2010 onwards non-financial corporations received proportionally more of their funding in the form of equity as opposed to loans. This trend is in line with the CSO *Access to Finance Survey* (2011a) which found that successful loan applications from credit institutions declined from 90 per cent in 2007 to 50 per cent in 2010, reflecting tighter credit controls by banks.

Chart 12: Non-Financial Corporate Funding



Source: Quarterly Financial Accounts.

4.4 Financial Corporations' Net Lending/Borrowing

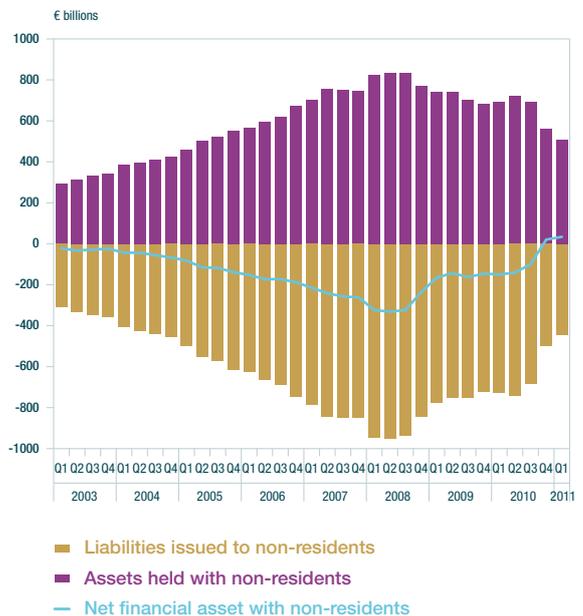
Financial corporations⁷ were net borrowers between Q1 2007 and Q3 2008, relying primarily on the rest of the world to fund their expansion. As the financial crisis intensified however, and it became more difficult to access the money markets for funding, this trend reversed from Q4 2008 onwards, as depicted in Chart 8.

Irish credit institutions grew rapidly in the years preceding the financial crisis. Anglo Irish Bank and Irish Nationwide grew by an average annual rate of 36 per cent and just over 20 per cent respectively, between 1998 and 2007 (Honohan, 2009). Credit institutions relied on funding from non-residents to finance much of this expansion. Chart 13 shows the rapid increase in the banks' liabilities with the rest of the world. This trend however was reversed in late 2008 as the global interbank markets froze as a result of the international financial crisis. Despite the introduction of a government guarantee of all Irish banks' liabilities in September 2008, Irish banks continued to

find it difficult to access funding from international investors from 2009 onwards, amidst concerns that the over-exposure of some banks to the property market was a serious problem. Consequently, Irish banks have received unprecedented support from the Irish Government and from the ECB so as to meet their funding requirements.

As discussed in section 4.2, Irish households have been reducing their debt levels since Q1 2009. The repercussions of this trend for credit institutions are evident from Chart 14. The credit institution sector had been a net lender to households up to July 2009, as they provided the sector with financing. This trend has since reversed however, as credit institutions are now net borrowers from the household sector who are reducing debt levels, thereby reducing the value of assets held by the banking sector.

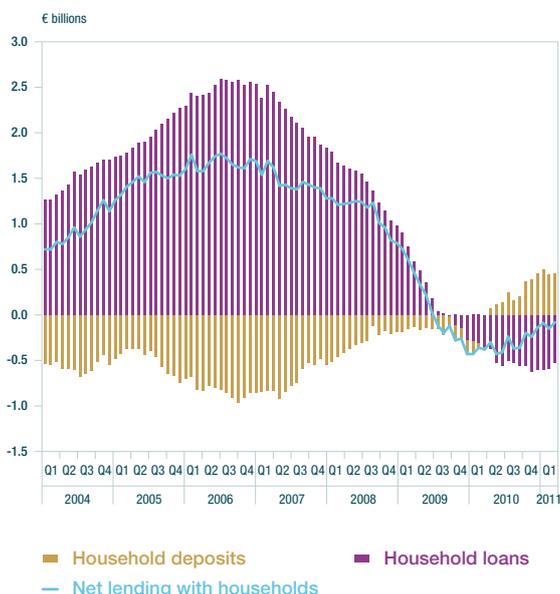
Chart 13: Credit Institutions' Net Financial Assets with Non-Residents (stocks)



Source: Money and Banking Statistics.

⁷ Financial corporations comprise of the Central Bank, credit unions, money market funds, credit institutions, financial auxiliaries, other financial intermediaries and insurance corporations and pension funds.

**Chart 14: Credit Institutions' Net Lending/
Net Borrowing vis-a-vis the Household Sector
(transactions), 12-month moving average**



Source: Money and Banking Statistics.

4.5 Non-Residents' Net Lending/ Borrowing

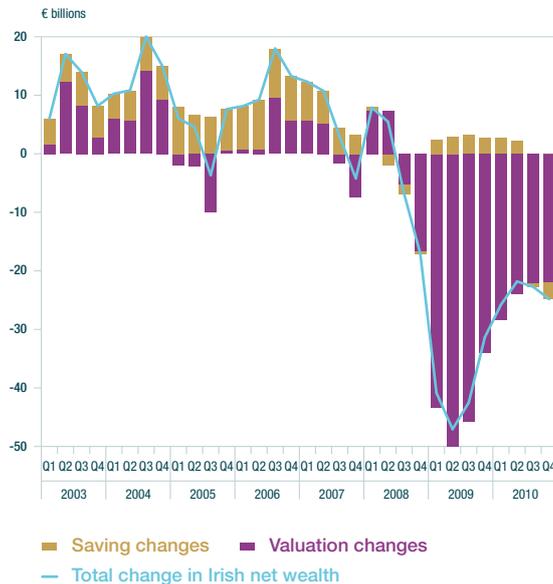
Between Q4 2006 and Q1 2009, the resident sectors combined had a net borrowing requirement, largely due to the rapidly expanding financial sector, which required funding from the rest of the world to finance its activities. Chart 8 shows a reversal of this trend from Q2 2009 to Q2 2010, as access to funding from the rest of the world became scarcer. Since Q3 2010, the domestic sector has been a net borrower once more. The higher financing requirement by Irish residents from the rest of the world predominantly reflects the increased funding needs of the Government sector. At end Q4 2010, 82 per cent of long-term Government bonds were held by non-residents. Higher funding needs by the Government sector from the rest of the world were offset, to some extent, by lower financing requirements by credit institutions, as banks reduced debt held with the rest of the world.

Net lending/borrowing trends illustrate a marked change in the behaviour of the institutional sectors of the economy in response to the financial crisis. Households, Government and the financial sector have all reversed their pre-crisis behaviour to adapt to the changing economic environment. Households and the financial sector became net lenders from Q4 2008 onwards, as both sectors are undergoing a process of deleveraging to reduce their pre-crisis debt levels. The deleveraging undertaken by Irish credit institutions has contributed to a reduction in net external liabilities, notwithstanding the increased external borrowing of the Central Bank from the Eurosystem. In contrast, the Government has become a net borrower, reflecting substantial financing requirements as a result of the banking crisis and the weaker economic environment.

5 The Contribution of Valuation Changes and Savings to Total Net Wealth

This paper has shown that since late 2008, a significant decline in net wealth has occurred due to declining asset values. In addition, institutional sectors have markedly altered their borrowing and investing behaviour since the financial crisis began. The relative contributions of valuation changes and savings behaviour to total Irish net wealth is depicted in Chart 15. The chart shows that most of the wealth lost by Irish residents since 2008 has been as a result of the enormous declines in asset values as outlined in section 3. Increased savings by Irish residents during 2009 and early 2010 contributed towards higher net wealth. This trend was however, reversed in Q3 and Q4 2010 as the domestic Irish resident sectors became net borrowers, largely as a result of higher Government borrowing over the period. Chart 15 clearly shows that despite the generation of savings since early 2009, net wealth has continued to decline given the much larger fall in asset values, largely reflecting the continued weakness in property assets.

Chart 15: The Determinants of Valuation and Savings Changes to Irish Net Wealth, 4-quarter moving average



Sources: Quarterly Financial Accounts and internal calculations.

6 Conclusions

This paper has shown that the decline in Irish net wealth since Q3 2008 has been considerable, amounting to around 1.8 times GDP. All institutional sectors of the economy have suffered declines in their net wealth. Households have, however, endured by far the largest drop in their net wealth largely due to declining housing asset values.

The financial crisis and the recession has also caused institutional sectors to significantly alter their net borrowing and lending behaviour. The Government sector has substantially increased net borrowing, as it provided capital injections to the financial sector and adapted to a worsening economic environment. In contrast, the household and financial corporate sectors have both become net lenders as they reduce high debt levels accumulated since the crisis. This shift in behaviour is important, because it can have implications for the funding of institutional sectors. Although the domestic sectors have been accumulating savings in most recent quarters, net wealth continues to decline, as the savings generated are offset by the much greater declines in asset values, particularly housing assets. This destruction of wealth across the economic sectors dispels the myth that for every 'loser' in the crisis, there was a corresponding 'winner'.

References

- CSO (2010), 'Survey on Income and Living Conditions (SILC) 2009', Central Statistics Office, November, www.cso.ie.
- CSO (2011a), 'Access to Finance Survey, 2007 and 2010', Central Statistics Office, May.
- CSO (2011b), 'Residential Property Price Index', Central Statistics Office, June.
- Cussen, M. and G. Phelan (2010), 'Irish Households: Assessing the Impact of the Economic Crisis', Central Bank of Ireland, Quarterly Bulletin, No. 4.
- Duffy, D. (2010), 'Negative Equity in the Irish Housing Market', *The Economic and Social Review*, Vol. 41, No. 1, Spring, pp 109 – 132.
- Foote, C., K. S. Gerardi and P. S. Willen (2008), 'Negative Equity and Foreclosure: Theory and Evidence', *Journal of Urban Economics*, Vol. 64, No. 2, pp 234 – 245.
- Gros, D. (2011), 'Ireland and the Euro Crisis: Is There Light at the End of the Tunnel?', presented at IIEA Conference, Dublin, April.
- Honohan, P. (2009), 'Resolving Ireland's Banking Crisis' *The Economic and Social Review*, Vol. 40, No. 2, Summer, pp 207 – 231.
- Honohan, P. (2010), 'The Irish Banking Crisis: Regulatory and Financial Stability Policy: 2003-2008', www.centralbank.ie.
- IMF (2009), 'World Economic Outlook: Crisis and Recovery', www.imf.org, April.
- Koo, R. C. (2008), 'The Holy Grail of Macroeconomics: Lessons from Japan's Great Recession', John Wiley and Sons.

Lin, J. Y. (2009), 'How to Solve the Global Economic Crisis: Making Fiscal Stimulus Packages Work Across the World', speech given at Peterson Institute for International Economics on February 9.

NAMA (2011), 'NAMA Quarterly Report, 31st December 2010', www.nama.ie, May.

O'Sullivan and Layte (2011), 'Income and Asset Levels of Older People'.

Reinhart, C. M. and K. S. Rogoff (2009), 'This Time is Different: Eight Centuries of Financial Folly', Princeton University Press.

Roxburgh, C., S. Lund, T. Wimmer, E. Amar, C. Atkins, J. Manyika, J. Kwek and R. Dobbs (2010), 'Debt and deleveraging: The global credit bubble and its economic consequences', January, McKinsey Global Institute.

Using the Bank Lending Survey to Understand the Recent Disruption to Financial Markets: An Overview

Bernard Kennedy¹

Abstract

The sharp decline in the growth rate of private sector credit since 2007 coupled with less favourable economic prospects highlight the importance of timely data on credit market conditions. The Euro Area Bank Lending Survey (BLS) contains valuable information in understanding credit market conditions regarding loans to enterprises as well as households. In addition, the survey has benefitted from a number of innovations in recent years. In particular, an expansion to Questions 2 and 3 as well as an increased prominence given to a number of ad hoc questions have provided greater insight to the Governing Council regarding the disruption to wholesale funding markets and its transmission into banks' lending policies more generally. The main focus of this article is to illustrate how the responses to the BLS reflect the disruption to financial markets that dominated the euro area during 2008 and 2009.

¹ The author is an economist in the Monetary Policy and International Relations Division and acknowledges the help and advice provided by Mark Cassidy, Carina Harte, Allen Monks, Maurice McGuire, and Gerard O'Reilly.

Section 1: Introduction

The Bank Lending Survey (BLS) was established by the Eurosystem in 2003 to provide more detailed qualitative information regarding current and future credit market conditions and their determinants. Given the unique source of information that the BLS provides concerning non-price terms and conditions for loans, the survey results are regularly used as an input into the decision making process concerning monetary policy. The qualitative nature of the survey responses provide an important complement to Money and Banking Statistics on loan growth, new loans issued, and interest rates disaggregated by borrower and loan volume. The survey provides just-in-time qualitative information regarding credit market conditions for loans to enterprises and households which account for over half of euro area private sector lending. Box 1 below summarises how the survey is completed each quarter.

The recent economic slowdown throughout the euro area, which was most acute from late 2008 to 2010, had its origins in the financial services sector where a combination of excessive leverage, increased recourse to complex financial products, and strong credit growth as well as higher levels of private sector indebtedness in recent years gave way to a sudden loss of market confidence triggering a reduction in liquidity and a general re-pricing of risk. The reliance by banks throughout the euro area in recent times on non-deposit sources of funding provided one channel by which this disruption to money markets was transmitted to the euro area economy through a reduction in banks lending capacity and their ability to meet the demand for loans. One of the most visible signs of the slowdown in euro area economic activity can be seen in the growth rate of credit aggregates which dropped from 13.5 per cent and 8 per cent in the case of loans to enterprises and households during the second quarter of 2007 to -2 per cent and 2 per cent respectively in the final quarter of 2010. The deceleration, decrease, and eventual stabilisation in the growth rate of

credit aggregates was all the more noticeable considering that private sector loan growth had consistently exceeded the growth rate of most measures of economic activity prior to 2007.

The disruption to wholesale funding markets that materialised in the second half of 2007 registered in the responses to the October 2007 round of the BLS. In this regard, a number of innovations to the questionnaire since 2007 meant that the survey was able to capture more fully, changes in credit conditions associated with the financial crisis. These included a more disaggregated series of responses regarding the change in credit conditions across firm size, as well as the impact of the financial market crisis on banks funding, capital and liquidity position and this is analysed in section 2. Section 3 reviews the research that has emerged in recent years using in part the BLS results. A comparison of the Irish and euro area survey responses is provided in section 4 and section 5 concludes.

Section 2: Using the Survey Responses to Track the Financial Crisis

The second half of 2007 witnessed a sudden disruption to financial markets throughout the euro area as well as the United States that was initially characterised by a marked reduction in banks' willingness to lend to each other and an increase in inter-bank lending rates. This disturbance in wholesale funding markets immediately registered in the responses to the October 2007 round of the BLS where a sudden and previously unexpected tightening of credit standards on loans to enterprises and households was recorded and this is displayed in Figure 1. In addition, the reported tightening of credit standards was partially attributed to banks funding and liquidity constraints – illustrating the transmission of financial market tensions onto banks' lending policies.

Figure 1: Actual and Expected Changes in Credit Standards on Loans to Enterprises and Households: 2007 – 2008



Source: ECB.

Note: The values displayed in Figure 1 are the net percentage of banks reporting a tightening of credit standards across loan category each quarter as well as the net percentage of banks forecasting a tightening of credit standards in the subsequent quarter.

Box 1: Completion of the Bank Lending Survey

The Bank Lending Survey (BLS) is completed over 5 weeks each quarter with the participating institutions returning the completed questionnaire to the National Central Banks (NCB). Throughout the euro area, each NCB nominates certain banks to participate in the survey to try and capture as closely as possible, developments in national credit markets. The response rate is typically 100 per cent, however not all banks answer all questions depending on their business model.

The sample of banks participating in the survey has increased from 82 when the survey was first completed in January 2003 to 120 in the July 2011 round of the survey following the expansion of the single currency area along with the BLS being extended to a greater number of banks amongst the initial group of countries participating in the survey. In April 2007, the survey was first expanded to include Slovenia and again in 2008 when Cyprus and Malta joined the single currency area. More recently, Slovakia and Estonia started to participate in the survey in April 2009 and April 2011 respectively. The participating institutions account for almost 50 per cent of total of euro area bank lending to Non-Financial Corporations (NFCs) and households.

The survey consists of 17 standard questions divided into two parts: the first part examines loans or credit lines to enterprises and the second part examines loans or credit lines to households with some differences between the questions that feature in each part of the survey. Both parts of the questionnaire ask whether or not credit standards have changed over the previous three months, the factors contributing to any such change, and the changes in the terms and conditions governing lending to enterprises as well as households. In other words: whether, why, and how credit standards have changed? The remaining questions ask whether loan demand has changed over the past three months, and what factors account for a change in loan demand, and whether credit standards or loan demand are expected to change over the next three months.

Frequently, the standard questionnaire is supplemented with ad-hoc questions examining topical issues in financial markets. For example, the July 2011 round of the BLS included two supplementary questions examining the likely impact of the Basel III directive on banks' risk weighted assets, capital position, and credit standards.

Box 1: Completion of the Bank Lending Survey

The questionnaire distinguishes between “Large Banks” and “Small Banks” based on loans outstanding although the published responses are not weighted by size of bank. Respondents select from five answers for each question with each of these response options having a value corresponding between 1 and 5 and this is examined in further detail in Box 2.

The euro area responses are calculated as a weighted average of the national responses based on the total amount outstanding of loans to NFCs and households.

The Irish and euro area results are published each quarter along with a summary of the responses and these results can be accessed through the attached weblinks: [Bank Lending Survey](#) and [Euro Area Bank Lending Survey Responses](#).

The survey was partially modelled on the Senior Loan Officer survey conducted by the U.S Federal Reserve since 1967 and preceded the Bank of England Credit Conditions survey that commenced in 2007. The responses can be used to gauge the accessibility of credit markets as well as the operation of different transmission channels of monetary policy throughout the euro area. A more detailed account of how the survey is completed each quarter is provided by Mottiar and Monks (2007).

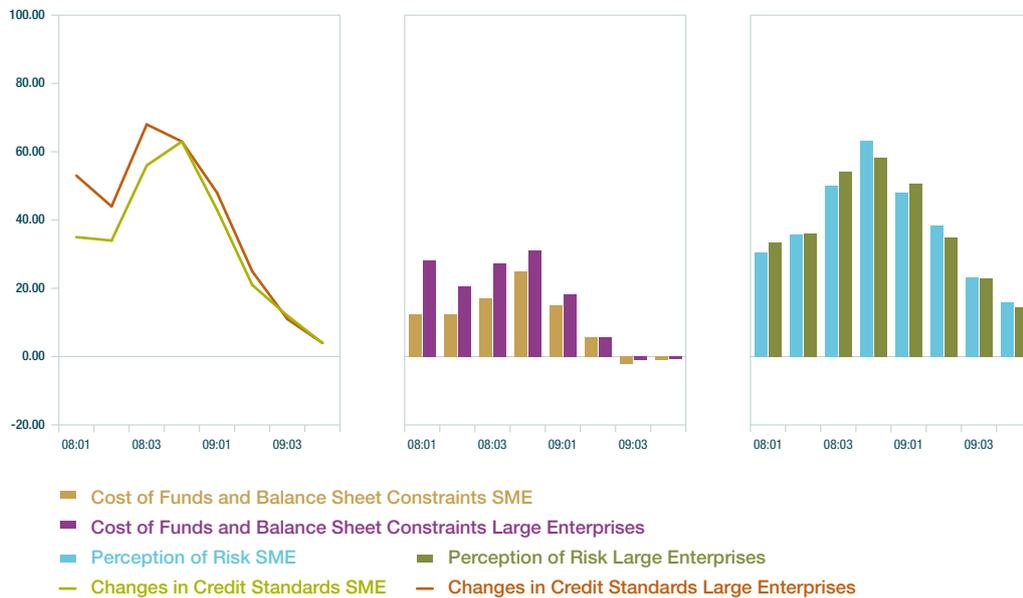
The tightening of credit standards coupled with the sharp drop in loan growth to Non Financial Corporations (NFCs) during 2008 highlighted the reliance of euro area businesses on bank lending as a source of external financing. The ECB structural issues report on corporate finance in the euro area (2007) contrasts the financing patterns of Small and Medium Sized Enterprises (SMEs) and large enterprises. Typically, smaller businesses will encounter greater challenges when attempting to access external sources of funding compared to larger enterprises due to, amongst other factors, greater information barriers, lower levels of available collateral, and limited bargaining power. In addition, the greater challenges SMEs typically encounter when accessing external finance may be compounded by their concentration in certain businesses and economic sectors such as retailing. Consequently, market based funding will typically be limited to larger enterprises and longer established companies.

To the extent that larger enterprises can substitute away from bank financing, a change in credit conditions can be expected to have a different impact on enterprises when firm size is accounted for. Consequently, questions 2 and 3 of the BLS examining the factors affecting credit standards as well as the terms and conditions governing lending to enterprises was expanded in 2008 to provide a more disaggregated set of responses regarding SMEs as well as large enterprises².

The strong and unexpected tightening of credit standards on loans to enterprises that was recorded from the second half of 2007 until the end of 2009 would have been expected to impact SMEs to a greater extent than larger enterprises. In contrast, the BLS reported the tightening of credit standards was greater for large enterprises than SMEs and this greater tightening was reflected in **Cost of Funds and Balance Sheet Constraints** which is intended to capture the contribution of funding and liquidity pressures on banks' credit standards and this is represented in Figure 2.

² The statistic used in the BLS to distinguish between SMEs and large enterprises is turnover. A firm is considered large if its annual net turnover is greater than €50 million.

Figure 2: Changes in, and Factors Affecting Credit Standards on Loans to Small and Medium Sized Enterprises and Large Enterprises 2008:01 – 2009:04



Source: ECB.

Note: Question 1 of the BLS asks banks to report how credit standards changed on loans to enterprises including SMEs and large enterprises and the net percentage of banks reporting a tightening of credit standards is displayed in the left side of Figure 2. Question 2 of the BLS asks banks to evaluate how different factors affected credit standards on loans to enterprises over the previous three months and is divided into three parts: **Cost of funds and balance sheet constraints** which includes costs related to banks capital position, banks ability to access market financing, and banks liquidity position; **pressure from competition** which includes competition from other banks, competition from non banks, competition from market financing and **perception of risk** which includes expectations regarding general economic activity, industry or firm specific outlook, as well as risk on collateral demanded. The net percentage responses displayed in Figure 2 regarding cost of funds and balance sheet constraints, as well as perception of risk are calculated as a simple average of the three underlying factors.

A complete explanation as to the why the tightening of credit standards was greater for large enterprises than SMEs is beyond the scope of this paper. However, one possibility is that banks that have closer relationships with large enterprises have greater reliance on wholesale funding markets. The BLS results show that the tightening of credit standards on loans to enterprises was implemented through price and non-price terms and conditions. However, the greater tightening of credit standards on loans to large enterprises compared to SMEs is reflected in reduced loan volumes and shorter loan maturities.

The BLS captured the initial tightening of credit standards on loans to enterprises and households towards the end of 2007. However, in order to understand more fully the disruption to wholesale funding markets and its impact on banks funding, liquidity, and ultimately their credit conditions, it was decided to supplement the BLS with a number of ad-

hoc questions. Since October 2007, thirteen ad-hoc questions have featured in the survey and were regularly updated in response to the changing nature of the crisis. The ad-hoc questions examined, among other factors, the impact of financial market turmoil on banks' credit standards, the extent to which access to wholesale funding markets was hampered across the maturity spectrum, and the need to fund draw-downs on commitments to asset backed commercial paper programmes.

Initially, the challenges European banks encountered in terms of restricted access to wholesale funding markets was associated with their holdings of U.S. mortgage backed securities and other asset categories that were heavily dependent on the U.S. property prices and in particular the sub-prime mortgage market. The decline in U.S. property values during 2007 and 2008 along with the use of Special Purpose Vehicles (SPV) to purchase these assets made it difficult to assess the

higher expected loan losses in this asset category. One of the first signs from the ad-hoc questions of money market tensions and lower levels of liquidity was the acceleration during 2008 in the proportion of banks reporting the need to fund draw-downs on commitments to asset backed commercial paper programmes. This reported deterioration coincided with a surge in the proportion of banks selecting the response option "Not Applicable" to the same question suggesting that a substantial proportion of banks may have been completely shut out from this funding source as 2008 progressed.

Since 2007, banks have been asked to evaluate access to market based sources of funding and these responses are represented in Figure 3. The initial disruption to wholesale funding markets was more acute at the longer end of the maturity spectrum reflecting the evaporation of liquidity and ratings downgrades that dominated the securitisation markets such as the market for mortgage backed securities from the start of 2008. As 2008 progressed, and following the bankruptcy of Lehman Brothers on the 15th September 2008, the deterioration in market access increased in intensity and began to spread towards the shorter end of the maturity spectrum.

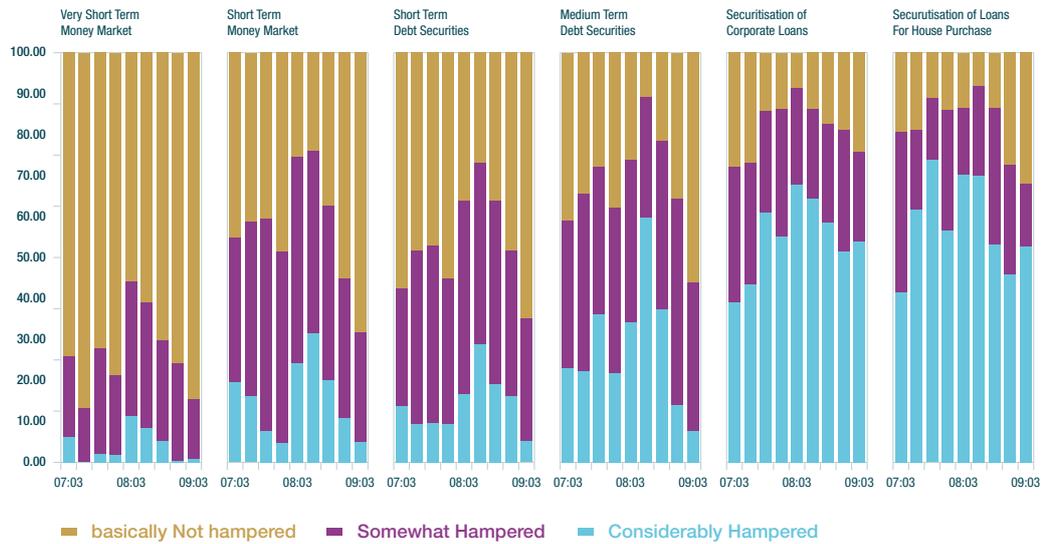
In an attempt to ascertain how the financial crisis impacted banks' lending policies, participants were asked to gauge, the extent to which restricted access to wholesale funding markets impacted on the margin at which loans were made along with the quantity of loans banks were willing to make available. The responses to this question are represented in Figure 4 below and suggest that the tensions in the inter-bank unsecured money markets and the markets for debt securities were reflected both in the price and quantity of credit provided but to a greater degree in the former. Alternatively in the case of the securitisation market, the impact of market tension appears to have been evenly transmitted between higher lending margins and lower securitisation volumes.

Following the bankruptcy of Lehman Brothers in September 2008 financial market volatility in the euro-area as measured by the EURIBOR-OIS rate surged as banks were reluctant to lend to each other for anything other than the shortest maturities. In response, several euro area governments announced partial guarantees for domestic banks covering current and future liabilities.

During the first three quarters of 2009, the majority of euro area banks reported that government initiatives regarding recapitalisation support and state guarantees greatly facilitated access to wholesale funding markets and this is represented in Figure 5. At the same time, the proportion of banks reporting a tightening of credit standards started to decelerate. In the case of loans to enterprises, the net percentage of banks reporting a tightening of credit standards decreased from 43 per cent to 3 per cent between the first and final quarter of 2009.

By the end of 2009, the responses to the BLS suggested that the pattern of credit standards tightening that extended back to the third quarter of 2007 was coming to an end. In addition, the proportion of banks reporting a deterioration in access to the inter-bank unsecured money markets as well as the market for debt securities had decreased. The improvement in access to wholesale funding markets which is captured in Figure 6 was interrupted in 2010Q2 when uncertainty about the ability of the Greek Government to roll over short-term debts led to a special funding agreement involving the European Central Bank, the European Commission, and the International Monetary Fund. However, only a small proportion of banks reported an actual deterioration in market access since then suggesting that the reported deterioration is confined to a small number of participating banks.

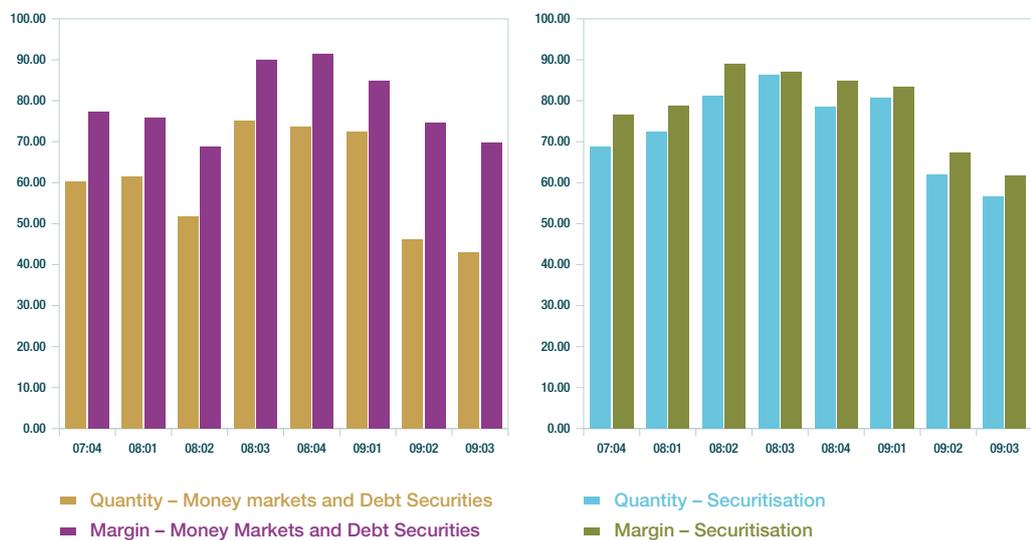
Figure 3: Access to Wholesale Funding Markets: 2007Q3 – 2009Q3



Source: ECB.

Note: Banks were asked to report using a three point scale **considerably hampered**, **somewhat hampered**, **basically not hampered** whether market access had been hampered over the previous three months. The values displayed in Figure 3 ignore the responses regarding the funding category credit risk transfer as over half of the participating banks have categorised this funding category as Not Applicable each quarter since this question was first included in the BLS.

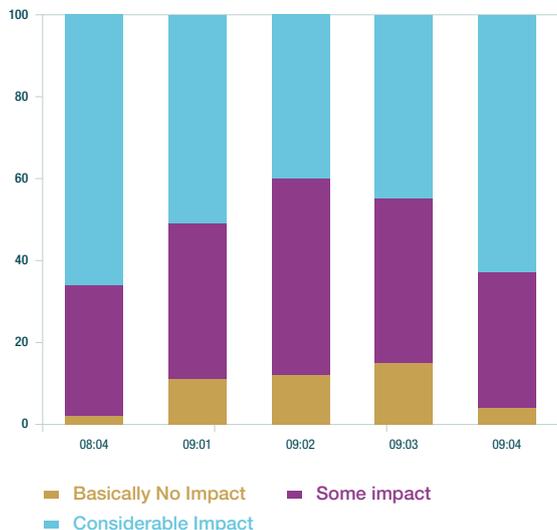
Figure 4: Impact of Restricted Access to Wholesale Funding Markets on banks' lending policies – Money Markets & Debt Securities and Securitisation Markets



Source: ECB.

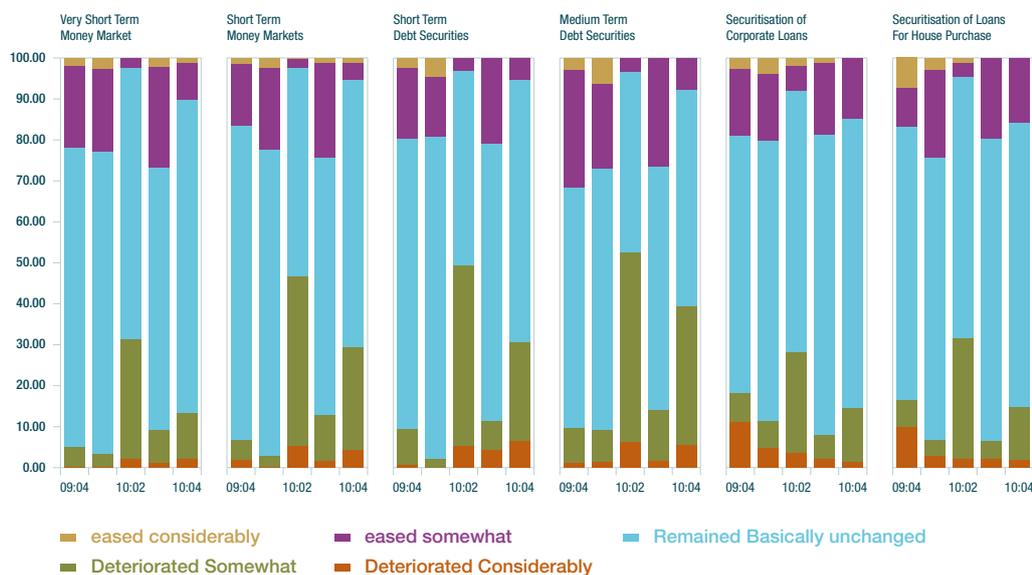
Note: Banks were asked to report using a three point scale: **considerable impact**, **some impact**, **basically no impact** whether or not restricted access to market funding impacted the quantity of loans banks were willing to make as well as the margin at which these loans were made. The question distinguished between money markets and debt securities as well as securitisation markets. The values displayed in Figure 4 are the sum of the proportion of banks selecting the response option **considerable impact** and **some impact**.

Figure 5: Impact of Government Initiatives Regarding Recapitalisation Support and State Guarantees



Source: ECB.

Figure 6: Access to Wholesale Funding Markets 2009Q4 – 2011Q1³



Source: ECB.

Note: Participants banks were asked to report how market access changed over the past three months using a five point scale: eased considerably, eased somewhat, remained basically unchanged, deteriorated somewhat, deteriorated considerably. In addition, banks were asked to report whether or not the ability to transfer credit risk had changed over the previous three months. However, the responses for this funding category are not displayed in Figure 6 as over half of the participating banks have classified credit risk transfer as Not Applicable each quarter.

3 Between the October 2007 and October 2009, banks were asked to report whether access to wholesale funding markets had been hampered across 7 different categories over the previous three months and whether or not it was expected to be hampered over the next three months using the following response options: **considerably hampered, somewhat hampered, basically not hampered**. A change was made to the response options accompanying this question from the January 2010 round of the survey. Banks were asked to report whether or not market access had **changed** over the previous three months and was expected to change over the next three months using the following response options: **deteriorated considerably/ will deteriorate considerably, deteriorated somewhat / will deteriorate considerably, remained unchanged / will remain unchanged, eased somewhat / will ease somewhat, eased considerably / will ease considerably**.

Box 2: Recent Improvements in Data-Metrics

Participating banks select from five possible responses for each of the 17 standard questions in the BLS and this allows one to measure both the magnitude as well as the direction of any change in credit conditions, loan demand, factors affecting loan demand, as well as the expected change in credit standards or loan demand. For example, Question 4 of the survey asks banks to report on whether loan demand from enterprises changed in the previous quarter and the response options to this question along with the value corresponding to each response is represented in Table 1 below.

Table 1: Changes in Loan Demand, Response Options and Corresponding Values

Response Option:	Decreased Considerably	Decreased Somewhat	Remained basically unchanged	Increased Somewhat	Increased Considerably
Value	1	2	3	4	5

The survey results reported each quarter at both a national and euro area level reflect this symmetric range of response options and are based on a simple average of all the responses provided to each question – the **mean response**, and the difference between the percentage of banks reporting a change in credit conditions in each direction – **the net percentage responses**. The net percentage responses for each question abstracts from the proportion of banks reporting unchanged credit conditions and, for example, in the case of changes in loan demand from enterprises, is calculated as the difference between the proportion of banks reporting an increase in loan demand and a decrease in loan demand.

The mean responses are bounded between 1-5 reflecting the values assigned to the different response options to each question and don't always capture substantial changes in the survey responses from one quarter to the next.

In contrast the net percentage responses are instead bound between -100% and +100%. For example, the substantial and unexpected tightening of credit standards on loans to enterprises and households during the third and fourth quarters of 2007 was more fully reflected by the net percentage responses compared to the mean responses as Table 2 illustrates.

Table 2: Changes in Credit Standards on Loans to Enterprises: 2007Q2 – 2007Q4

	Mean Responses	Net Percentage Responses
2007Q2	3.03	-2.8%
2007Q3	2.69	31.3%
2007Q4	2.53	40.5%

A feature of the survey responses is that the answers to all of the standard questions tend to be clustered around the response **remained basically unchanged** as the response option **considerably** is rarely chosen by the participating banks. One potential limitation with the net percentage responses is that equal weight is given to all the response options, i.e. the same weighting is given to a bank reporting that loan demand decreased considerably or decreased somewhat. Since 2009, the euro area results report an alternative complementary measure, the **Diffusion Index**, which characterises further the distribution of the responses to each question. The Diffusion Index is calculated in a similar way to the net percentage responses except that half the weight is given to the response option **somewhat** compared to the response option **considerably**. Consequently, the reported value of the diffusion index will nearly always be less, in absolute terms, than the net percentage responses.

Section 3: Recent Research on the Bank Lending Survey

3.1 Research on the Information Content of the Bank Lending Survey

Since 2007, a number of research papers have emerged using the historical responses to the BLS. In the main, these papers can be separated into a number of categories: those that use the historical responses to understand the leading indicator properties of the survey, papers that attempt to distinguish shocks to credit growth emanating from shifts in loan supply vis-a-vis loan demand, and papers that use the historical responses to examine the existence of different transmission channels of monetary policy.

The recent research on the BLS mirrors previous research undertaken on the survey properties of the Senior Loan Officer (SLO) survey conducted by the U.S. Federal Reserve. Papers such as Lown et al. (1998) and Lown and Morgan (2006) have identified the historical responses to the SLO as providing important information in helping to forecast commercial bank lending and GDP growth after controlling for past economic conditions and interest rates. More recently, Bassett et al (2010) find that the responses to the SLO help in understanding changes in bank lending between 1992 and 2009.

De Bondt et al. (2008) examine the leading indicator properties of the BLS with respect to bank lending to NFCs and GDP growth and find that credit standards on loans to enterprises along with non-price terms and conditions help explain euro area loan growth and GDP growth. Changes in credit standards as well as loan demand from enterprises and households lagged one to four quarters are statistically significant in explaining loan growth to enterprises and households.

Previous techniques that have been used to try and distinguish shocks to loan supply and loan demand are outlined by Pazarbasiouglu (1997) as well as Peek and Rosengren (1995)⁴. However, distinguishing between shocks to loan supply and loan demand is complicated by the expected co-movement between these two variables and neither of these techniques have enjoyed universal success.

Changes in credit standards on loans to enterprises and households as reported in the BLS are often interpreted as a measure of loan supply as they are designed to capture all factors both qualitative e.g. change in business sentiment, and quantitative e.g. changes in sectoral lending limits, that affect banks' lending criteria. In addition, the survey responses report how the demand⁵ for loans from enterprises and households changed each quarter and these proxies are being used in a growing number of papers to try and account more fully for the growth in euro area credit aggregates.

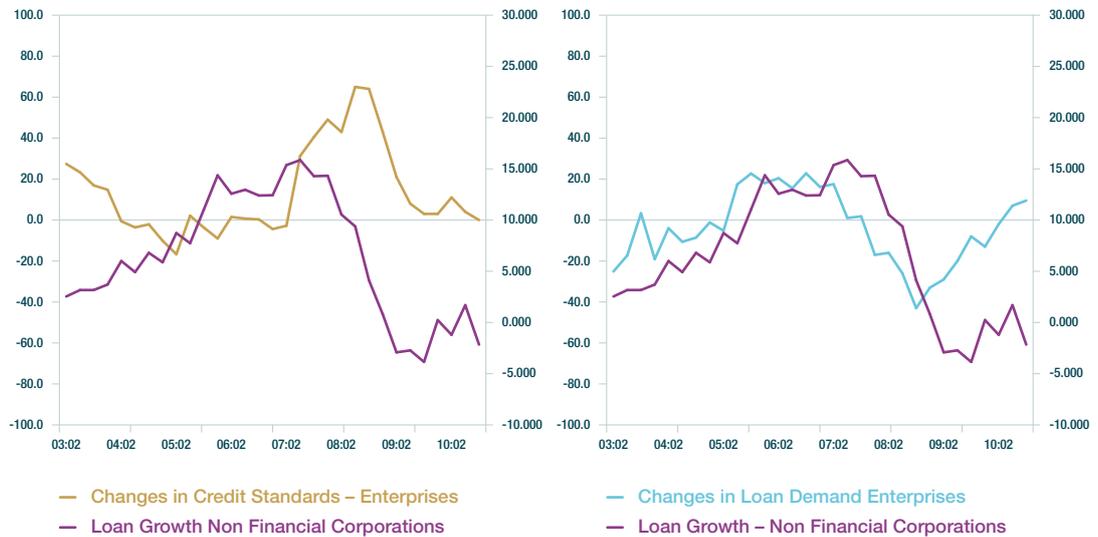
Figure 7 jointly displays changes in credit standards, changes in loan demand and loan growth to NFCs and point to a strong co-movement between the two survey indicators and actual loan growth to enterprises.

A more rigorous examination of the impact of loan supply and loan demand on loan growth is provided by Hempell and Sorensen (2010). The authors implement a cross country panel regression to understand the evolution of euro area loan growth to NFCs and households. They find that changes in credit standards, changes in loan demand, and the terms and conditions governing loans or credit lines help explain loan growth across different lending categories since 2003. In particular, strains on banks' liquidity position as well as their access to market financing were very

⁴ Pazarbasiouglu (1997) uses Disequilibrium econometrics which consists of a three equation system estimated via maximum likelihood to distinguish shocks to loan supply and loan demand. Alternatively, Peek and Rosengren (1995) use bank level data coupled with certain assumptions as to what shocks are likely to impact loan supply and loan demand.

⁵ The change in loan demand reported in the BLS is not based on any particular data metric e.g. loan enquiries at branch level, formal loan applications received at branch level, the proportion of loan applications approved at group credit committee level. Instead, the reported change in loan demand is likely to draw on developments in all of these stages of the demand process. However, as the questionnaire is typically completed by somebody at group credit committee level, e.g. senior loan officer, the responses are more likely to reflect developments at group credit committee level and this could be considered as a narrower and more stable measure of loan demand.

Figure 7: Changes in Credit Standards, Changes in Loan Demand and Loan Growth to Non Financial Corporations and Households



Source: ECB.

Note: The values displayed in Figure 7 include the annualised growth rate of lending to Non Financial Corporations along with the net percentage of banks reporting a tightening of credit standards and increase in loan demand.

significant between 2007 and 2009 in helping to explain the drop in loan growth whereas such measures were not significant prior to the crisis.

Giovane and Nobili (2010) use the responses of the Italian banks participating in the BLS and find that the proportion of banks reporting a tightening of credit standards on loans to enterprises is crucial in explaining the evolution of loan growth to NFCs whereas the proportion of banks reporting a decrease in loan demand is much less important. Amongst the factors impacting credit standards, cost of funds and balance sheet constraints is the most significant in helping to explain changes in loan growth.

Finally, Gerali et al. (2010) incorporate the historical Loan-to-Value (LTV) ratios in the case of loans to enterprises as reported in the BLS into a dynamic stochastic general equilibrium specification for the euro area. The authors try to capture the impact of shocks to the supply of credit using LTV ratios and conclude that it played an important part in driving interest rates on lending to NFCs since 2005.

3.2 Research on the Transmission Channels of Monetary Policy Using the Bank Lending Survey.

As far back as the 1960s Brunner and Metzler commented on the importance of financial variables in macro-economic models and this was further emphasised by Bernanke (1983) in explaining the depth and duration of the great recession. More recently, important contributions to the interaction of monetary policy and macro-economic activity have been advanced by Bernanke and Blinder (1988) and Bernanke Gertler and Gilchrist (1996). The ideas formulated in both these papers are more commonly referred to as the credit channel of monetary policy which consists of the Bank Lending Channel and the Balance Sheet Transmission Channel. The interest rate channel concentrates on the relationship between changes in central bank policy rates and deposit and lending rates faced by businesses and households. However, the credit channel emphasises how financial markets are characterised by imperfections. Agency costs associated with imperfect information between lenders and borrowers creates a wedge between the cost of internal and external funds and increase the sensitivity of investment to variables such as cash-flow or net worth.

The bank lending channel, also known as the “narrow credit channel” is based on the imperfect substitutability of loans and other asset classes. It assumes that monetary tightening drains liquidity from the banking system: as a result, bank liabilities are shrinking. Because of this decline in total liabilities banks have to adjust assets accordingly. In addition, the bank lending channel assumes that the decline in the supply of loans affects borrowers as households and small businesses would lack direct access to capital markets. The balance sheet channel emphasises borrowers’ financial structure in the propagation of financial shocks. A change in monetary policy can impact the expected net worth of borrowers and this in turn will impact on their borrowing capacity as these changes are reflected in firms external finance premium.

The BLS results are being used in a growing number of empirical papers examining the presence of the different transmission channels⁶. Ciccarelli et al. (2010) using a panel vector autoregression based on the national responses to the BLS find evidence that the credit channel is operational throughout the euro area. After applying different specifications, the authors report the existence of both the bank lending and balance sheet transmission channels. Some of these results are reinforced by Cappiello et al. (2010) who use a very different specification but provide further evidence of a bank lending channel in the euro area.

Section 4: Irish Responses to the Bank Lending Survey

When the survey commenced, five Irish banks were selected to participate based on market coverage of loans to enterprises and households. However, one of the original 5 banks was dropped from the April 2011 round of the survey with a different institution now completing the survey in order to fully capture developments in credit markets.

A significant change has occurred regarding credit intermediation in Ireland since 2007 and the responses to the BLS provide a useful lens for interpreting these developments. The most obvious change concerns the growth rate of credit aggregates to NFCs and households where an annual growth rate of 35.7 per cent and 26.4 per cent was recorded respectively in early 2007 and more recently, a decline of -2.2 per cent and -4.6 per cent for each category was reported in April 2011. In parallel with this change in credit aggregates, a noticeable tightening of credit standards has featured in the Irish responses. Across all loan categories, the tightening of credit standards and decrease in loan demand happened at approximately the same time.

The Irish and euro area responses to the BLS since 2007 show a number of similarities, in particular, the change in credit standards on loans to enterprises and households and this is displayed in Figure 8. However, the tightening of credit standards since 2007 was more acute and longer lasting in Ireland particularly regarding loans to households for house purchases. The tightening of credit standards reported by Irish banks was almost entirely attributed to **Cost of Funds and Balance Sheet Constraints** as well as **Increased Risk Perception** and has been reflected in both price and non-price terms and conditions including higher loan margins and more restrictive lending conditions.

⁶ Questions 2, 9, and 11 examine the factors affecting credit standards on loans to enterprises and households and the different factors banks are asked to evaluate are intended to represent the bank lending and balance sheet transmission channels.

Figure 8: Changes in Credit Standards on Loans to Enterprises and Households: Ireland and the Euro Area

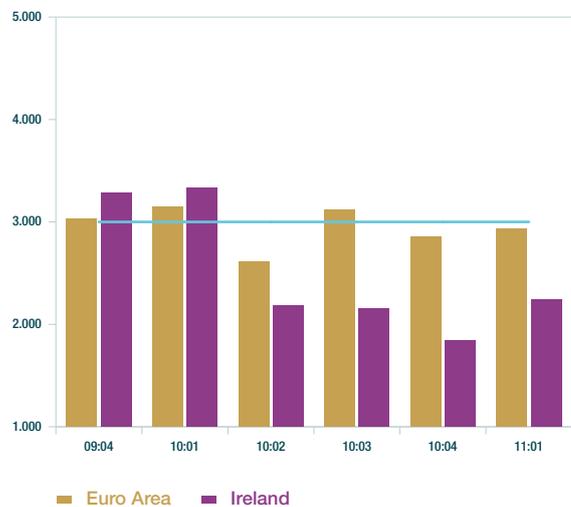


Sources: ECB and Central Bank of Ireland.

Note: Banks were asked to report, using a five point scale, how credit standards changed on loans to enterprises as well as households and the mean responses to these questions are represented in Figure 8. A value less than 3 implies a tightening of credit standards, a response equal to 3 represents unchanged credit standards, and a response greater than 3 reflects an easing of credit standards.

One of the most salient features of credit institutions in Ireland up to 2007 was the increased reliance on wholesale funding markets. This increased reliance on wholesale funding was characterised by increased borrowing in money markets and greater issuance of debt securities. In contrast to some euro area banks, there was less reliance on more complex off balance sheet items such as SPV. The responses provided by the Irish banks to the ad-hoc questions show how access to wholesale funding markets came under considerable strain towards the end of 2007 and this trend accentuated towards the end of 2008. More recently, the second major disruption to wholesale funding markets at a euro area level that commenced in the second quarter of 2010 onwards appears to have been more severe for the Irish banks compared to the euro area banks and this is displayed in Figure 9.

Figure 9: Access to Wholesale Funding Markets: Ireland and the Euro Area



Sources: ECB and Central Bank of Ireland.

Note: Banks were asked to report, using a five point scale, how access to market financing changed over the previous three months across 7 different categories. A response less than three represents a deterioration in market access; a response equal to three implies unchanged market access and a response greater than three implies an improvement in market access. The responses displayed in Figure 9 are calculated as a simple average of the mean response for each of these different funding categories.

Section 5: Conclusion

Since its introduction in 2003, the BLS has helped to provide a more complete understanding of developments in credit markets and, by extension, macro-economic activity more generally given the information content of the survey responses. A number of important innovations to the survey since 2007 have occurred and they have provided three main benefits: a new data-metric that emphasises the distribution of the selected responses to each question from one quarter to the next; a more disaggregated set of responses that illuminate the factors affecting credit standards as well as the terms and conditions governing lending across firm size; and an increased prominence given to a group of ad-hoc questions that help in understanding how the rupture to wholesale funding markets in 2007 impacted the funding and capital positions of banks as well as their lending policies.

The sharp slowdown in loan growth and less favourable economic prospects throughout the euro area from 2007 to 2010 highlighted the importance and value of timely data on credit market conditions across loan size. In this regard, the BLS responses continue to illuminate the different transmission channels of monetary policy as well as the importance of supply and demand side factors when accounting for loan growth across lending categories. As the amount of data associated with the BLS increases over the coming years, the opportunities to use the survey responses for empirical research such as testing for the different transmission channels of monetary policy is certain to improve.

References

Bassett, W. F., M. B. Chosak, J. C. Driscoll, and E. Zakrajsek (2010): “Identifying the Macroeconomic Effects of Bank Lending Supply Shocks”, *Division of Monetary Affairs, Federal Reserve Board*.

Bernanke, B. and A. Blinder (1988): “Credit Money and Aggregate Demand”. *American Economic Review*, May 1988, papers and procedures; Vol 78, No 2.

Bernanke, B., M. Gertler, and S. Gilchrist (1996): “The Financial Accelerator and the Flight to Quality” – *Review of Economics and Statistics*; Vol 78, No 1; Feb (1996); pp.1-15.

Beck, T. and A. Demircuc-Kunt (2006): “Small and medium sized enterprises: Access to finance as a growth constraint.” *Journal of Banking & Finance*, 30 (2006) 2931-2943.

Corporate Finance in the Euro Area (2007): European Central Bank Structural Issues Report.

Cappiello, L., A. Kadareja, C. K. Sorensen, and M. Protopapa (2010): “Do bank loans and credit standards have an effect on output? A panel approach for the euro area.” *European Central Bank working paper series No 1150 / January 2010*.

Ciccarelli, M., A. Maddaloini, and J.L. Peydro (2010): Trusting the bankers: A new look at the credit channel of monetary transmission. *European Central Bank Working Paper Series No 1228 / July 2010*.

De Bondt, G; A. Maddaloini, J. L. Peydro, and S. Scopel (2010): “The Euro Area Bank Lending Survey Matters: Empirical evidence for credit and output growth.” *European Central Bank working paper series No 1160 / February 2010*.

Del Giovane, P., G. Aramo, and A. Nobili (2010): “Disentangling demand and supply in credit developments: a survey based analysis for Italy.” *Banca d’Italia Working Paper No. 764, June 2010.*

Gerali, A., S Neri, I. Nessa, and F. Signoretti (2010): “Credit and banking in a DSGE model of the euro area.” *Banca d’Italia Working Paper No. 740, January 2010.*

Hempell, H., and C. K. Sorensen (2010): “The Impact of Supply Constraints on Bank Lending in the Euro Area – crisis induced crunching.” *European Central Bank working paper series No 1262 / 2010.*

Holton, S., and M. O’Brien (2011): “Firms’ Financing During the Crisis: A Regional Analysis.” *Central Bank of Ireland, Quarterly Bulletin 01, January 2011.*

Lown, C., D. P. Morgan, and S Rohtagi (2000) : “Listening to Loan Officers: the impact of commercial credit standards on lending and output”, *Federal Reserve Bank of New York, Economic Policy Review, 6, 2, 1-16.*

Lown, C., and D. P. Morgan (2006) : “The Credit Cycle and the Business Cycle: New Findings Using the Loan Officer Opinion Survey.” *Journal of Money, Credit and Banking, Vol. 38(6), pages 1575 – 1597.*

Maddaloini, A., and J.L. Peydro (2009): “Bank Risk Taking, Securitisation, Supervision, and Low Interest Rates.” *European Central Bank working paper series No 1248 / October 2010.*

Mottiar, R., and A. Monks (2007): “The Bank Lending Survey for Ireland.” *Central Bank of Ireland, Quarterly Bulletin 2, 2007.*

Pazarbasioglu, C. (1997) : “A Credit Crunch? Finland in the aftermath of the Banking Crisis”, *IMF Staff Papers, Vol. 44, No.3, September (1997).*

Peek, J. and Eric Rosengren (1995): “The Capital Crunch: Neither a borrower nor a lender Be”. *Journal of Money Credit and Banking, Vol. 27, No. 3, (August 1995), pp. 625-638.*

Appendix 1: Ad-Hoc Questions⁷

In a large number of countries in the euro area, loans for house purchase have shown strong growth rates in recent years. This question addresses some of the reasons behind this development, focusing on loans to households secured by real estate and used for purposes other than the acquisition of a principal residence.

Question 1: How does the share of loans to households secured by real estate contracted over the last 12 months for purposes other than the acquisition of a principal residence compare with the share of such loans in the previous 12-month period? – **July 2006**

	Purchase of second homes or homes for investment purposes (“buy-to-let”)	Other purposes*
Considerably lower		
Somewhat lower		
Basically unchanged		
Somewhat higher		
Considerably higher		
Not Applicable		

Question 2: On the basis of the information available to you, what share of the volume of the outstanding amount of loans to households secured by real estate currently on the books of your bank do you estimate was used for purposes other than the acquisition of a principal residence? **July 2006.**

As a percentage of all mortgage loans	Purchase of second homes or homes for investment purposes (“buy-to-let”)	Other purposes*
Minor (0 to 10 percent)		
Significant (10 to 20 percent)		
Considerable (more than 20 percent)		
Not applicable		

*) This category covers, for example, consumption, financial investment, and redemption of debt, as well as the situation in which a parent borrows a mortgage for the purpose of transferring the funds to a son or daughter for the purchase of a house.

⁷ Appendix 1 lists all of the ad-hoc questions that have featured in the BLS since July 2006 when two supplementary questions were included for the first time. The only change to the standard 17 questions since the survey commenced is the expansion of questions 2 and 3 to examine the factors affecting credit standards as well as the terms and conditions regarding loans or credit lines to SME as well as large enterprises. As the 17 standard questions in their original format are outlined by Mottiar and Monks (2007), they are not repeated here.

Question 3: What effect has the situation in financial markets had on your bank's credit standards over the past three months? – **October 2007 – October 2008**

	Loans and credit lines to enterprises		Loans to Households	
	SME's	Large Enterprises	For House Purchase	Consumer Credit and other lending
Contributed considerably to a tightening of credit standards				
Contributed somewhat to a tightening of credit standards				
Basically had no impact on credit standards				
Contributed somewhat to easing of credit standards				
Contributed considerably to an easing of credit standards				
N/A(*)				

Question 4: What effect do you expect the situation in financial markets to exert on your bank's credit standards over the next three months? **October 2007 to October 2008**

	Loans and credit lines to enterprises		Loans to Households	
	SME's	Large Enterprises	For House Purchase	Consumer Credit and other lending
Contribute considerably to a tightening of credit standards				
Contribute somewhat to a tightening of credit standards				
Has basically had no impact on credit standards				
Contributed somewhat to an easing of credit standards				
Contributed considerably to an easing of credit standards.				
N/A(*)				

(*) Please select "N/A" (not applicable) only if your bank does not conduct business in a particular loan category.

Question 5⁸: What effect has the situation in financial markets had on your bank's credit standards for the approval of loans and credit lines to enterprises over the past three months? How do you expect the situation to affect these credit standards over the next three months? Please make a distinction by loan purpose. **October 2007 to October 2008**

	Over the past three months			Over the next three months		
	Fixed Investment	Inventories and Working Capital	M&A and corporate restructuring	Fixed Investment	Inventories and Working Capital	M&A and corporate restructuring
Contributed / will contribute considerably to a tightening of credit standards						
Contributed / will contribute somewhat to a tightening of credit standards						
Basically no impact on credit standards						
Contributed / will contribute somewhat to an easing of credit standards						
Contributed / will contribute considerably to an easing of credit standards						
N/A(*)						

(*) Please select "N/A" (not applicable) only if your bank does not conduct business in a particular loan category.

⁸ A minor change was made to ad-hoc Questions 3-5 between the October 2007 and January 2008 rounds of the BLS with two additional response options provided to each question that allowed banks to indicate if the situation in financial markets contributed or was expected to contribute either *somewhat* or *considerably* to an easing of credit standards.

Question 6: As a result of the situation in financial markets, has your market access been hampered when tapping your usual sources of wholesale funding and/or has your ability to transfer credit risk been hampered over the past three months, or are you expecting this access/activity to be hampered over the next three months? Please rate each factor using the following scale.

October 2007 – October 2009⁹

- = considerably hampered
- = somewhat hampered
- O = basically not hampered
- N/A = Not Applicable

	Over the past three months			Over the next three months			N/A*
	--	-	O	--	-	O	
A) Inter-bank unsecured money market							
- Very short term money market (up to one week)							
- Short-term money market (more than one week)							
B) Debt Securities							
- Short-Term Debt Securities (e.g. certificates of deposit or commercial paper)							
- Medium to Long term debt securities (incl. covered bonds)							
C) Securitisation							
- Securitisation of Corporate Loans							
- Securitisation of Loans for House Purchase							
D) Ability to transfer credit risk off balance sheet							
E) Other markets (please specify)							

⁹ When ad-hoc question 111 first featured in the October 2007 round of the BLS, **part D) Ability to transfer credit risk off balance sheet** was not included. The format of this question was later changed to facilitate a more symmetric distribution of responses and the new wording of the question along with the new choice of responses is detailed below.

Question 7: If you stated in response to the above question that one or more of your usual means of accessing wholesale funding markets were (will be) considerably or somewhat hampered over the past (next) three months, did (will) this have an impact on the quantity that your bank is willing to lend and/or the margin at which funds were (will be) lent over the past (next) three months¹⁰?

October 2007 – October 2009.

(a) For money markets, debt securities or other markets (Section A, B, and E of the above question)*

	Over the past three months	Over the next three months
Quantity		
Considerable Impact		
Some Impact		
Basically no impact		
Margin		
Considerable Impact		
Some Impact		
Basically no impact		
N/A(**)		

(**) Please select "N/A" (not applicable) only in case your bank has applied "basically not hampered" or "N/A" to the above question.

(b) For Securitisation (Section C and D of the above question)

	Over the past three months	Over the next three months
Quantity		
Considerable Impact		
Some Impact		
Basically no impact		
Margin		
Considerable Impact		
Some Impact		
Basically no impact		
N/A(**)		

¹⁰ A minor change to this Question took place between the October 2007 and January 2008 rounds of the BLS when the question was expanded to look at the impact of restrictions to wholesale funding markets over the previous three months as well as the impact over the next three months.

Question 8: To what extent have (will) needs to fund draw-downs on commitments to asset-backed commercial paper programmes issued by conduits or Structured Investment Vehicles affected (affect) your lending policies over the past (next) three months? **January 2008 – October 2008.**

	Over the past three months	Over the next three months
Quantity		
Considerable Impact		
Some Impact		
Basically no impact		
Margin		
Considerable Impact		
Some Impact		
Basically no Impact		
N/A(+)		

(+) Please select "N/A(+)" only if the funding source is not relevant for your bank.

Question 9: To what extent have the events in financial markets affected the costs related to your bank's capital position and has this constrained your willingness to lend over the past three months and could this constrain your willingness to lend over the next three months? **October 2007 – January 2011**

	Over the past three months	Over the next three months
Considerable impact on both capital and lending		
Considerable impact on capital, and some impact on lending		
Some impact on both capital and lending		
Some impact on capital, but no impact on lending		
Basically no impact on capital		
No reply		

Question 10: What effect has the government's announcement and introduction of recapitalisation support and state guarantees for debt securities issued by banks had on your bank's access to wholesale funding markets over the past three months, and what effect are you expecting over the next three months? **January 2009 – January 2010**

	Over the past three months	Over the next three months
Basically no impact on market access		
Some improvement in market access		
Considerable improvement in market access		
N/A(**)		

(**) Please select N/A (not applicable) only if your government has not announced any of the above-mentioned measures.

Question 11: Since the first quarter of 2008, how has the transition to the Capital Requirement Directive (Directive 2006/48/EC) affected the credit standards for the following loan categories? (The period to be considered is Q1 2008 – Q2 2009) **July 2009.**

	Small and Medium sized enterprises	Large Enterprises	House Purchase	Consumer credit and other lending
Contributed considerably to tightening of credit standards				
Contributed somewhat to tightening of credit standards				
Basically no impact on credit standards				
Contributed somewhat to easing of credit standards				
Contributed considerably to easing of credit standards				
N/A(***)				

(***) Please select N/A (not applicable) only if your bank does not conduct business in a particular loan category.

Question 12: Please indicate how you expect your bank's credit standards as applied to the approval of loans or credit lines, to change over the next twelve months: **January 2010.**

- - = will tighten considerably
- = will tighten somewhat
- O = will remain basically unchanged
- + = will ease somewhat
- ++ = will ease considerably

	Over the next twelve months				
	- -	-	O	+	++
Enterprises					
Overall					
Loans to SMEs					
Loans to Large enterprises					
Households					
Loans for house purchase					
Consumer credit and other lending					

Question 13: Over the next twelve months, how do you expect the following factors to affect your bank's credit standards, as applied to the approval of loans or credit lines, for the respective loan categories? **January 2010.**

- = will contribute considerably to a tightening
- = will contribute somewhat to a tightening
- O = will have basically no impact
- + = will contribute somewhat to an easing
- ++ = will contribute considerably to an easing
- N/A = not applicable

	Over the next twelve months					
	--	-	O	+	++	N/A
A) Cost of funds and balance sheet constraints						
<i>Enterprises</i>						
Overall						
Loans to SMEs						
Loans to Large Enterprises						
<i>Households</i>						
Loans for house purchase						
Consumer credit and other lending						
B) Pressure from competition						
<i>Enterprises</i>						
Overall						
Loans to SMEs						
Loans to Large Enterprises						
<i>Households</i>						
Loans for house purchase						
Consumer credit and other lending						
C) Perception of Risk						
<i>Enterprises</i>						
Overall						
Loans to SMEs						
Loans to Large Enterprises						
<i>Households</i>						
Loans for house purchase						
Consumer credit and other lending						

Question 14: How have your risk-weighted assets and your capital position changed over the past six months in order to comply with the capital requirements set out in “Basel III”* (or any other specific national regulations concerning banks’ capital that have recently been approved or are expected to be approved in the near future), and how do you expect these to change over the next six months and in 2012?

(Please do not take into account the “mechanical” effects that the implementation of Basel III will have on risk weights and the definition of capital.)

- - = decreased / will decrease considerably
- = decreased / will decrease somewhat
- O = remained / will remain basically unchanged
- + = increased/ will increase somewhat
- ++ = increased / will increase considerably
- N/A = Not Applicable

	Over the past six months					Over the next six months					2012					N/A
	--	-	O	+	++	--	-	O	+	++	--	-	O	+	++	
Risk-weighted assets																
Of which:																
Average loans																
Riskier loans																
Capital Position																
Of which:																
Retained earnings																
Share Issuance																

* See Basel III: A global regulatory framework for more resilient banks and banking systems, Basel Committee on Banking Supervision, Bank for International Settlements, 16 December 2010 (<http://www.bis.org/publ/bcbs189.pdf>)

Question 15: How have your bank's credit standards for loans changed over the past six months as a result of adjustments implemented and/or planned owing to the new capital requirements set out in "Basel III" (or any other specific national regulations concerning banks' capital that have recently been approved or are expected to be approved in the near future), and how do you expect these to change over the next six months and in 2012?

- = contributed / will contribute considerably to a tightening of credit standards
- = contributed / will contribute somewhat to a tightening of credit standards
- O = had / will have no impact on credit standards
- + = contributed / will contribute somewhat to easing of credit standards
- ++ = contributed / will contribute considerably to easing of credit standards

		Loans and Credit lines to		Loans to Households	
		Small and Medium sized enterprises	Large enterprises	For House Purchase	Consumer credit and other lending
Over the past six months	--				
	-				
	O				
	+				
	++				
Over the next six months	--				
	-				
	O				
	+				
	++				
2012	--				
	-				
	O				
	+				
	++				

Meeting the Statistical Challenges of Financial Innovation: Introducing New Data on Securitisation

Brian Godfrey and Clive Jackson¹

Abstract

This article introduces a new data series on the aggregated balance sheet and transactions of special purpose vehicles resident in Ireland, which complements the new Monetary Financial Institution (MFI) data on securitisation. It outlines the types of structures of resident vehicles and the reasons why these entities choose to set up in Ireland. The article further looks at the use of securitisation by domestic MFIs and how its use as a funding tool has changed over time, especially since the onset of the financial crisis in 2007. An overview of the domestic Financial Vehicle Corporation (FVC) sector is given by FVC type and their aggregated balance sheets, with particular attention paid to securitised loans' assets. The role of the National Asset Management Agency (NAMA) vehicles is also discussed. The article also considers the diverse activities that are carried out by FVCs resident in Ireland.

¹ The authors are Economists in the Statistics Division of the Central Bank of Ireland and on secondment to the Monetary and Financial Statistics Division of the European Central Bank, respectively. The views expressed are those of the authors and are not necessarily those of the Central Bank of Ireland or the European Central Bank. The authors would like to acknowledge the helpful comments of Joe McNeill. In addition, the authors are grateful to Mark Bohan, Maura Finnie, Beverly Horan and Ciara O'Leary for their valuable contributions to this publication.

Section 1: Introduction

The Central Bank of Ireland is launching a new dataset on the aggregated balance sheet and transactions of resident entities set up for the purpose of carrying out securitisations, namely financial vehicle corporations (FVCs). These corporations make up 16 per cent of the total financial sector in Ireland in terms of assets, but until recently were poorly covered by official statistics. Their activities encompass a wide range of securitisations originated by mainly non-domestic entities, and Ireland is one of the primary locations for these types of financial transactions in the euro area. The statistics on FVCs complements the improvements in the data available on securitisation and other loan transfers by monetary financial institutions (MFIs) across the euro area.

Securitisation is a financial innovation which played an important role in the funding of MFIs in many countries before the financial crisis, in what is termed the 'originate and distribute' model. The transfer of credit risk from the balance sheets of MFIs to investors in asset-backed securities reduced MFIs' capital requirements, and allowed the exchange of long-term illiquid assets (mortgages) into funds for further lending. Securitisation was also a means for MFIs to manage excess concentrations in their loan books. In Ireland, securitisation formed an important part of the funding mix for MFIs, and its use increased rapidly between 2005 and 2007 in a period of rapid credit growth and house price increases, during which the funding gap between deposits and loans widened.

The financial crisis, which began with fears about securitisations which had been backed by sub-prime mortgages in the US, swiftly led to a freezing of the securitisation market. Some of the sub-prime-backed debt securities had been repackaged into further securitisations (a process which may be called 're-securitisation') and a lack of transparency on where the exposures to the at-risk underlying assets lay, led to a lack of confidence in a wide range of asset-backed securities. The financial engineering which was used to package the assets and to create tranches of debt securities with varying degrees of risk added to the uncertainty.

The closing of the markets in asset-backed securities during the financial crisis excluded securitisation as a means of funding for banks, and liquidity became a critical concern throughout the financial system. Furthermore, although securitisation was seen as a means of diversifying banks' exposures to credit risk, a significant proportion of this risk had remained within the sector through MFI holdings of asset-backed securities, which in turn led to fears about the exposures of some banks to losses on these securities. FVCs which had been set up as highly-leveraged conduits, e.g. structured investment vehicles (SIVs), were engaged in the process of maturity transformation of the long-term asset-backed securities into short-term commercial paper, a model which was no longer viable. These conduits quickly failed, or their liabilities were brought onto the balance sheets of sponsoring MFIs.

Securitisation resumed as an important source of funding for MFIs across several euro area countries from end-2007, but instead of the debt securities being used to pass credit risk to investors in the market, the debt securities were instead held by the MFI ('retained securitisations') to be used in refinancing operations with central banks. In response, the ECB has initiated a number of reforms to increase the transparency of asset-backed securities which may be used as collateral in Eurosystem refinancing operations, notably the initiative on loan-level data in portfolios. The asset-backed securities markets, as well as banks more generally, must also respond to reforms in Basel III and the Capital Requirements Directive which will impact on the relative attractiveness of securitisation, and the level of risk which must be retained by the originating institution. Although there have been a small number of recent securitisations which have been placed with investors in the market, there has so far been limited signs of securitisation returning to the same scale as before the crisis.

The ESCB began to examine how securitisation activities by banks should be properly integrated into the statistical framework in 2005. The data gaps which were already apparent before the financial crisis, became more acute as the crisis unfolded. Two new ECB Regulations were, therefore, adopted by the ECB Governing Council in December 2008² to address the needs of policy makers for information on securitisation activities:

- First, data on securitisation and loan transfers reported by MFIs have been enhanced to include greater detail on sectoral breakdowns, loan purpose and transfer counterparties. Although this information was available for some Member States, it was not available on a harmonised basis across the euro area. Such information may now be used to adjust series on credit flows and growth rates for lending to all sectors by MFIs.
- Second, data on the balance sheets and transactions of the FVC sector, which not only are important as financial intermediaries, but are also key to understanding risk transfer within the MFI and other financial sectors (particularly where this is conducted on a cross-border basis) are now reported directly by the institutions.

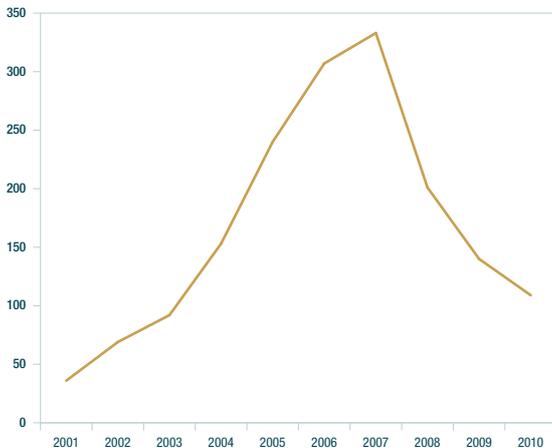
This article will introduce the new data on securitisation and its uses. These quarterly data collected as part of the new Regulations commencing with reference period end-2009 are summarised in Box 1. The article will also provide an overview of the securitisation industry in Ireland in terms of how resident vehicles are used for carrying out securitisations, and also how domestic institutions have used securitisation over the past decade and a half. An analysis of the main assets and liabilities of FVCs will be provided, including an overview of the heterogeneous activities which are carried out by domestic FVCs.

Section 2: Ireland as a Common Jurisdiction for Securitisation Activities

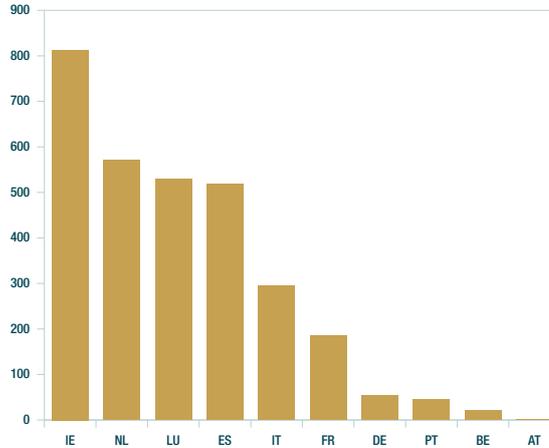
Concurrent with the growth of securitisation by domestic MFIs, Ireland became a common jurisdiction for the establishment of FVCs to carry out securitisations for originators outside Ireland. The facility to establish these vehicles was seen as a key part in completing the range of financial services on offer in the International Financial Services Centre (IFSC). Certain tax provisions for securitisation companies located in the IFSC were first introduced in 1991 which allowed them to be structured as broadly profit- and tax-neutral. These provisions could be utilised by companies holding 'qualifying assets', and were extended to transactions outside the IFSC in Section 110 of the Taxes Consolidation Act 1997 (effective in 1999). The range of qualifying assets was widened considerably in an amendment of Section 110 in Section 48 of the Finance Act 2003. Qualifying companies – or 'Section 110 companies' – may hold equities, bonds, receivables, leases and derivatives as assets. Qualifying assets were further extended in subsequent years, to include investments in money market funds in 2006, greenhouse gas emissions, insurance/reinsurance contracts in 2008, and commodities in 2011.

New registrations of Section 110 companies with the Revenue Commissioners – the national tax authority – grew rapidly from 2001 (Chart 1) to over 300 companies per annum in 2006 and 2007, before falling sharply following the crisis. Although some of the registered companies may not have actually taken up activities, or may be outside the scope of the FVC definition, this indicates the rapid growth in the number of special purpose entities established in Ireland. This growth reflected the increase in the use of securitisation globally, but was also due to the relative advantages of Ireland as a jurisdiction for securitisations, including for example: a common law environment, an accommodative regulatory environment and an English speaking workforce and legal system located within the euro area.

² Regulation ECB/2008/32 concerning the balance sheet of the MFI sector (OJ L 15, 20.1.2009, p.14) and Regulation ECB/2008/30 concerning statistics on the assets and liabilities of FVCs engaged in securitisation transactions (OJ L 15, 20.1.2009, p.1).

Chart 1: New Registrations of Section 110
Companies with the Revenue Commissioners

Source: The Revenue Commissioners.

Chart 2: Country Breakdown of FVCs Resident
in the Euro Area, end-Q1 2011

Source: ECB.

Within the euro area, there are ten countries which have resident FVCs, but they are largely concentrated in a few countries (Chart 2). There are over 800 Irish-resident vehicles currently on the list of FVCs for statistical purposes³. In particular, Ireland, the Netherlands and Luxembourg provide the domicile for over 60 per cent of FVCs resident in the euro area, a sizeable number of which are involved in cross-border transactions. Spain and Italy also have a large number of FVCs which are related mainly to the securitisation of domestic institutions. FVCs make up approximately 16 per cent of the financial sector in Ireland as of Q4 2010, and 4 per cent of the financial sector in the euro area. The publication of these new data allows a first insight into activities in the domestic FVC sector and how this fits into securitisation activities carried out by domestic, other euro area and rest of world institutions.

Section 3: Domestic MFIs' Use of Securitisation

The first securitisation of Irish mortgages was of IR£200 million in 1996 and the first significant period of growth was seen from 1998 to 2001, when the percentage of securitised mortgages that were moved off balance sheet grew from under 3 per cent of total mortgages in Q2 1998 to over 11 per cent in Q4 2001 (Chart 3). Securitisation was initially restricted to specialist mortgage lenders who used securitisation of mortgages as a funding tool for their business models.

The second period of growth in the Irish securitisation market was from 2005 to 2007, as the larger credit institutions, including the main domestic banks became involved in the market, with securitisation used as a means to fill the funding gap between deposits and loans during this period of strong credit growth and property price increases⁴. The amount of mortgages derecognised as a percentage of total mortgages began to increase again, growing from just under 4 per cent in Q4 2005 to 12 per cent at the end of 2007, at which time just under €17 billion worth of loans had moved off the balance sheets of the larger credit institutions. Issuance of covered bonds

³ FVCs were required to register with the national central bank of where they are resident by March 2009, or within one week of taking up business if they are established after that date (Article 3 of the FVC Regulation, ECB/2008/30).

⁴ Doyle (2009) and Addison-Smyth *et al* (2007).

Box 1: New Statistical Requirements and Uses of Data

The new data on securitisation in the euro area covers (1) securitisation carried out by euro area MFIs, and (2) FVCs established in the euro area authorised to carry out such securitisations. Most of the loans originated by euro area MFIs are securitised within the euro area, although the FVC may not necessarily be resident in the same jurisdiction as the MFI. Therefore, the approach used must take into account the often cross-border nature of securitisations. Data are collected from MFIs and directly from FVCs themselves.

For MFIs, the securitisation data requirements (Regulation ECB/2008/32) greatly enhance the limited (and non-harmonised) information previously available to policy makers. The data cover both securitisations of loans which are derecognised from the MFI balance sheet and those which are not. Whether or not transferred loans are derecognised from the balance sheet depends on the applicable accounting treatment, and may differ according to national practices.

The flows of securitisations and other transfers of loans from the balance sheets of MFIs are reported on a net basis – i.e. disposals minus acquisitions – for domestic and other euro area Member State borrowers, with a breakdown by sector: general government, other financial intermediaries, insurance corporations and pension funds, non-financial corporations, and households. These monthly data allow better information on credit developments in these sectors and ensure that loans which are derecognised from the MFI balance sheet are not misinterpreted in the analysis of new lending. Loans to households are further broken down by purpose of the loan on a quarterly basis: consumer credit, house purchase, and ‘other’ purposes (e.g. loans for investment, student loans, and loans to sole proprietors). Outstanding amounts of loans and net flows of loans securitised which are *not* derecognised from the balance sheet of the MFI are also collected.

For FVCs, detailed data are collected on their balance sheets and financial transactions under Regulation ECB/2008/30. The greatest level of detail required on FVC balance sheets relates to the holdings of securitised loans which have been originated by euro area MFIs. Financial transactions are the acquisition or disposal of assets or liabilities, and they exclude foreign exchange or other revaluations and write-downs. Financial transactions in securitised loans include the purchase (or sale) of a pool of loans at the value of the transaction (even if this is less than the nominal amount outstanding on the loans) as well as principal repaid on the loans. Financial transactions in debt securities issued by the FVCs include new issuances and redemptions of existing securities.

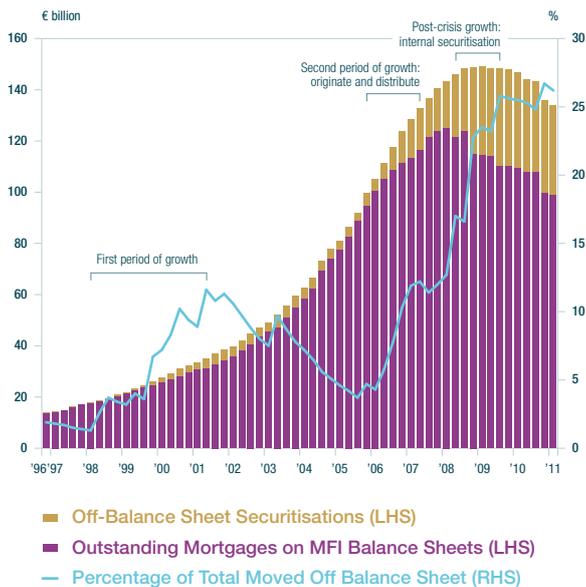
These two new datasets will contribute to the closing of some of the statistical data gaps that appeared over the last decade and which were further highlighted during the recent financial crisis. They will allow for harmonised balance sheet reporting by entities that are involved in securitisation activity within the euro area and facilitate greater analysis of the types of structures and activities of these entities. These new data on MFI securitisations will also enhance euro area monetary analysis by contributing to a better understanding of the monetary aggregates.

The new data will also shed more light on the effects of securitisation on the domestic and euro-wide economy, by enhancing our understanding of credit risk transfer, providing greater insight into the role of FVCs in financial intermediation, supplementing the information available on alternatives to bank finance and improving our understanding on balance of payments flows and positions. It will also lead to further analysis of the links between MFIs and the other financial institution (OFI) sector that arise through loan securitisation.

Although these new statistics commenced in the period following the peak of market-led activity, they have been crucial in understanding large shifts in the balance sheets of MFIs which occurred as a result of the crisis – e.g. the use of securitisation by European credit institutions in the form of retained securitisation to be used as collateral to gain access to ECB funding, and the transfer of impaired and illiquid assets to ‘bad banks’.

also increased during this period, as some credit institutions set up 'mortgage banks' in order to issue asset-covered securities. However, unlike securitisations, loans transferred to mortgage banks remained within the MFI sector and were not recorded off-balance sheet.

Chart 3: Mortgages On- and Off-Balance Sheet of Irish MFIs



Source: Central Bank of Ireland.

The financial crisis, which hit financial markets in mid-2007, led to the freezing of the global securitisation market due to investor concerns regarding the underlying risk associated with asset-backed securities. This affected Irish credit institutions' use of securitisation amidst growing concerns about the availability of liquidity across the financial system. As access to market funding became more difficult, retained securitisations became increasingly important for Irish credit institutions with the proportion of loans that had been moved off balance sheet reaching a peak of 27 per cent of outstanding mortgages in Q4 2010, amounting to €36 billion in value terms [excluding transfers to the National Asset Management Agency (NAMA)]. In addition, there were retained securitisations in which loans were not derecognised from the balance sheet. These amounted to €32 billion at end-2009 (the first data collected). The motivation for retained securitisations was to create eligible assets to be used in central bank refinancing operations – a trend that was seen

across many other euro area countries. This was achieved by securitisation vehicles issuing notes in the form of debt securities which were then 'purchased' by the domestic banks and subsequently used as collateral with the ECB. This meant that mortgages on the domestic banks' balance sheets were being replaced by holdings of debt securities issued by securitisation vehicles set up by the domestic banks themselves.

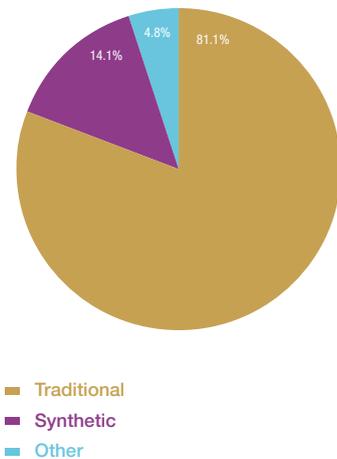
Section 4: Overview of Domestic FVCs

4.1 FVC Type

FVCs are classified according to the nature of securitisation: 'traditional', 'synthetic' and 'other', and undertake a wide range of different activities. An overview of the types of operation conducted by Irish resident FVCs is outlined in Box 2. The domestic FVC population also includes NAMA, whose activities are discussed in Section 4.3 below. Traditional securitisations generally involve a transfer of credit-based assets to an FVC, whereas for synthetic securitisations there is no transfer of assets, but credit risk is instead transferred through a credit default swap, guarantee or similar mechanism. There is also a residual category for 'other' FVCs, which includes mainly securitisations of assets which are not credit based.

In Ireland, the largest securitisation type in Q1 2011 was traditional, representing 81 per cent of the total reporting population (Chart 4), which accounts for €443 billion of total assets of €546 billion. Synthetic securitisations were the next largest type at 14 per cent (€77 billion). The total assets of synthetic FVCs must be treated with some caution, as the securitisation may not be 'fully funded' – i.e. the extent of the credit risk exposure may exceed the amount of collateral which is held by the vehicle. Typically this collateral is held in deposits or invested in high-grade securities. 'Other' securitisations, largely the securitisation of non-financial assets, comprise just under 5 per cent (€26 billion) of total assets.

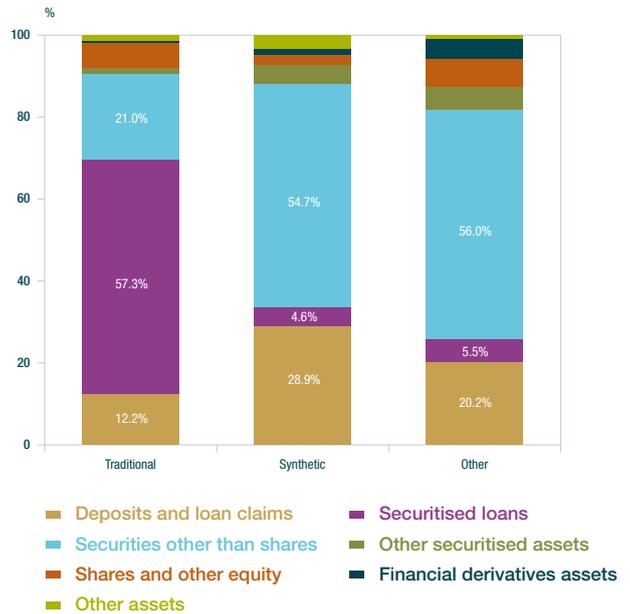
Chart 4: Breakdown of Total Assets by FVC Type, end-Q1 2011



Source: Central Bank of Ireland.

For traditional FVCs, securitised loans are the predominant asset type, amounting to €254 billion, which accounted for over 57 per cent of total assets (Chart 5) in Q1 2011. This was followed by securities other than shares at 21 per cent, or €93 billion in value terms, and deposits and loan claims at just over 12 per cent. This is in sharp contrast to synthetic FVCs, where securitised loans made up a much smaller proportion of the balance sheet, accounting for less than 5 per cent of total assets. The main asset class for synthetic FVCs was securities other than shares at 55 per cent of total assets, followed by deposits and loan claims, which were also sizable at 29 per cent. The large differential in the proportion of securitised loans between traditional and synthetic FVCs is due to synthetic FVCs taking on the credit risk of the securitised loans and not the actual loans themselves. Similarly for other FVCs, securitised loans accounted for only 5 per cent of total assets, with securities other than shares the predominant asset type at 56 per cent, followed by deposit and loan claims at 20 per cent.

Chart 5: Asset Breakdown by FVC Type, end-Q1 2011



Source: Central Bank of Ireland.

4.2 FVC Aggregated Balance Sheet

In the aggregated FVC balance sheet (Table 1) securitised loans at €259 billion and securities other than shares at €150 billion combined to make up nearly 75 per cent of total assets held at end-Q1 2011. The rest of the asset side of the balance sheet is made up of deposits and loan claims, shares and other equity, other securitised assets, and other assets.

The sector of the counterparty is also reported for certain asset classes. The large increase in deposits and loan claims with other euro area FVCs from just under €8 billion in Q4 2009 to €36 billion in Q1 2011, or 44 per cent of all deposits and loan claims in that quarter, relates primarily to the activities of NAMA FVCs. Securities other than shares issued by euro area FVCs, on the other hand, fell over the same period from just over €38 billion in Q4 2009 to €19 billion in Q1 2011, with a substantial amount of this drop due to a large outflow of almost €14 billion in Q4 2009. As some securitisation structures may involve a number of separate FVCs – perhaps in different jurisdictions – these ‘of which FVC’ items are crucial to be able to net out inter-FVC positions, and avoid double-counting. Over 55 per cent of securities other than shares are

issued by non-euro area residents, while other monetary union members (OMUMs) make up 32 per cent, the majority of which are issued by the non-MFI sector which includes securities issued by euro area FVCs.

A breakdown of other securitised assets originated by euro area general government and non-financial corporations shows FVC holdings of just over €1 billion and €3 billion, respectively, for these sectors. For the shares and other equity asset category, the main issuer was euro area FVCs, accounting for around 90 per cent of all securities issued in all quarters – this reflects gross reporting of intra-group positions within FVC group structures.

Deposits and loans between euro area FVCs, shareholdings in other FVCs and holdings of notes issued by FVCs are also captured through the 'of which FVCs' position on the balance sheet of all reporting FVCs, which allows for a consolidated picture of the FVC sector. In an overall context the figures for loans and deposits are relatively small in comparison to total assets. For Q4 2009, the domestic deposits and loan claims asset class was only €8 billion, but due to the activities of NAMA, these deposits and loan claims grew to around €36 billion in Q1 2011. As expected, this figure is also reflected on the liabilities side of the balance sheet with a corresponding 'of which FVCs' for deposits and loans received by domestic FVCs.

Securitised loans are also further broken down into four different loan categories by originator sector and geography as follows:

1. Euro area MFIs
2. Euro area NFCs
3. Other euro area resident
4. Non-euro area resident

The majority of securitised loans were originated by euro area MFIs, accounting for over 70 per cent of all securitised loans for all quarters for which data are available. Securitised loans increased from €209 billion in Q4 2009 to close to €260 billion in Q1 2011, with a large flow of around €15 billion, mainly from the domestic NFC sector, into this asset class

in Q4 2010 (Chart 6). This was somewhat offset by an outflow of €6 billion from the domestic and OMUMs household sectors in the following quarter. The next largest originator of these loans is the non-euro area resident sector, which accounted for 15 per cent of total securitised loans in Q1 2011 at €39 billion. The other originating categories for which data are available, i.e. euro area NFCs and other euro area resident sectors, showed FVC holdings of loans worth around €20 billion and €1 billion, respectively, in all quarters.

Chart 6: Flows of Securitised Loans by Originator



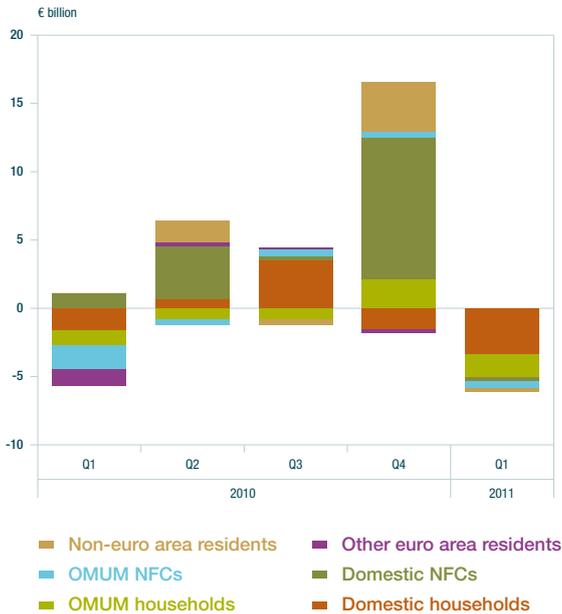
Source: Central Bank of Ireland.

Irish FVC holdings of securitised loans originated by euro area MFIs are further disaggregated by borrowing sector. The largest component comprised lending to euro area households, accounting for 52 per cent of all loans originated by euro area MFIs in Q4 2009, with domestic household loans predominant. The overall share for euro area households fell to 41 per cent (€82 billion) in Q1 2011. Conversely, the amount borrowed by domestic households increased in value from €64 billion in Q4 2009 to €72 billion in Q1 2011 and also increased as a percentage of the euro area total. This increase was primarily due to valuation effects.

Table 1: Assets and Liabilities of Irish Financial Vehicle Corporations

€ billion	End-Quarter Outstanding Amounts						Quarterly Transactions				
	2009 Q4	2010 Q1	2010 Q2	2010 Q3	2010 Q4	2011 Q1	2010 Q1	2010 Q2	2010 Q3	2010 Q4	2011 Q1
Assets											
Deposits and Loan Claims	76.3	68.2	74.1	71.9	87.2	81.7	-10.2	2.6	-1.8	15.3	-4.8
<i>To euro area FVCs</i>	7.8	7.1	15.0	17.6	35.0	36.0	-0.8	7.8	2.7	17.5	0.7
Securitised Loans	209.3	204.2	218.8	224.2	263.8	258.5	-6.6	6.0	-0.9	12.9	-3.6
Originated by euro area MFIs	147.3	143.5	156.8	165.1	207.1	200.2	-4.8	5.2	3.1	14.7	-6.1
<i>By borrowing sector:</i>											
Domestic households	64.0	62.4	65.2	70.0	73.5	71.6	-1.6	0.6	3.5	2.8	-3.3
OMUM households	12.7	11.6	10.8	10.1	12.1	10.4	-1.1	-0.8	-0.8	1.7	-1.7
Domestic non-financial corporations	5.9	7.0	15.8	20.5	43.7	41.3	1.1	3.9	0.3	8.9	-0.3
OMUM non-financial corporations	31.1	29.7	29.3	29.0	30.7	29.9	-1.7	-0.4	0.5	-0.6	-0.5
Other euro area residents ^a	17.0	15.6	15.9	16.0	15.6	15.8	-1.4	0.3	0.1	-0.8	0.0
Non-euro area residents	16.6	17.2	19.7	19.5	31.4	31.2	0.0	1.6	-0.4	2.6	-0.3
Originated by euro area non-financial corporations	22.0	19.7	19.7	19.6	17.5	18.2	-2.5	-0.3	0.0	-2.1	0.9
Originated by other euro area sectors ^a	1.3	1.2	1.1	1.2	1.1	0.9	-0.2	-0.1	0.1	-0.1	0.0
Originated by non-euro area residents	38.7	39.8	41.2	38.3	38.2	39.2	0.9	1.1	-4.0	0.4	1.6
Securities other than shares	182.3	169.6	170.3	159.0	154.4	149.9	-15.9	0.0	-9.4	-3.0	-2.9
<i>Issued by euro area FVCs</i>	38.4	22.6	23.8	21.4	20.1	18.9	-13.6	3.0	-2.0	-1.8	-0.8
Other securitised assets	13.2	11.0	13.4	13.3	12.0	11.7	-1.1	1.0	0.0	-1.2	0.1
<i>Originated by euro area general government</i>	2.5	2.4	2.4	2.3	2.3	1.1	0.0	-0.1	0.0	0.0	0.0
<i>Originated by euro area non-financial corporations</i>	2.8	2.8	3.6	3.6	3.3	3.1	0.0	0.7	0.1	-0.3	0.0
Shares and other equity	35.2	36.6	34.7	34.0	34.9	30.6	0.8	-1.9	-0.7	-0.1	-4.4
<i>Issued by euro area FVCs</i>	32.3	33.3	31.1	30.6	31.4	27.1	0.1	-2.2	-0.5	-0.4	-4.2
Other assets	21.9	20.1	16.2	18.2	22.5	13.6	-1.6	-2.6	1.8	3.6	-12.2
Liabilities											
Loans and deposits received	36.0	34.1	42.6	46.8	63.2	61.2	-1.9	6.3	2.9	16.5	-1.6
<i>From euro area FVCs</i>	11.0	10.3	19.1	21.5	39.0	39.7	-0.6	8.8	2.4	17.6	0.5
Debt securities issued	478.6	452.6	453.0	438.7	445.2	421.5	-29.6	-0.1	-11.6	9.7	-22.0
<i>Up to 1 year original maturity</i>	34.5	32.0	30.3	29.6	29.2	29.7	-1.5	-2.2	-0.3	0.2	0.3
<i>1 to 2 years original maturity</i>	8.7	9.5	8.3	5.3	7.1	5.5	-0.8	-1.2	-3.0	1.9	-1.5
<i>Over 2 years original maturity</i>	435.3	411.0	414.4	403.7	408.9	386.3	-27.2	3.4	-8.3	7.5	-20.8
Capital and reserves	3.4	2.0	2.2	1.6	1.6	1.3	-1.1	-0.4	0.2	-1.5	-0.1
Other liabilities	20.2	21.0	29.7	33.5	64.8	61.9	-2.0	-0.7	-2.5	2.6	-4.3
Total	538.2	509.6	527.5	520.6	574.8	546.0					

^a Other euro area sectors include general government, other financial intermediaries, insurance corporations and pension funds.

Chart 7: Flows of Securitised Loans by Borrowing Sector

Source: Central Bank of Ireland.

Within securitised loans, lending to euro area NFCs comprised the second largest component, growing from 25 per cent in Q4 2009 to 36 per cent in Q1 2011. This was all driven by loans to domestic NFCs which increased from €6 billion in Q4 2009 to over €40 billion in Q1 2011. The majority of this increase was due to valuation effects of €20 billion, which can be largely attributed to NAMA, but there was also €4 billion and €10 billion net transactions (Chart 7), mainly due to transfers related to NAMA, in Q2 and Q4 2010, respectively.

Securitisation of loans to other euro area residents remained fairly constant at around €16 billion for all quarters, but there was a large increase in the value of securitised loans vis-à-vis non-euro area residents, which was primarily driven by transfers to NAMA. These loans jumped from €19 billion in Q3 2010 to about €31 billion in the following two quarters, with valuation effects accounting for just over €7 billion of this increase. Net transactions accounted for the balance of the increase from Q4 2009 to Q1 2011.

The liabilities side of the balance sheet consists of loans and deposits received, debt securities issued, capital and reserves and other liabilities, with debt securities accounting for over 75 per cent of total liabilities in Q1 2011.

The bulk of debt securities issued were over two years maturity which accounted for over 90 per cent of all debt securities issued in all quarters. Outstanding debt securities issued fell from €479 billion in Q4 2009 to €421 billion in Q1 2011, with large net redemptions of €27 billion and €21 billion in Q1 2010 and Q1 2011, respectively. Short-term debt securities of up to one year maturity, mainly in the form of commercial paper, accounted for 7 per cent of all debt securities in each quarter.

Loans and deposits liabilities increased from €36 billion in Q4 2009 to over €60 billion in Q1 2011, largely due to transactions attributable to NAMA of just over €6 billion in Q2 2010 and almost €17 billion in Q4 2010. Other liabilities increased from around €20 billion in the first reporting quarter to over €60 billion in Q1 2011. The majority of this increase reflects the statistical treatment of haircuts on securitised loans transferred to NAMA – this is further discussed in the following section. There were outflows of funds classified to other liabilities over the full reporting period as net transactions which amounted to minus €7 billion. Capital and reserves accounted for under 1 per cent of total liabilities. Low capital in relative terms is to be expected given the nature of accounting for such vehicles.

4.3 NAMA

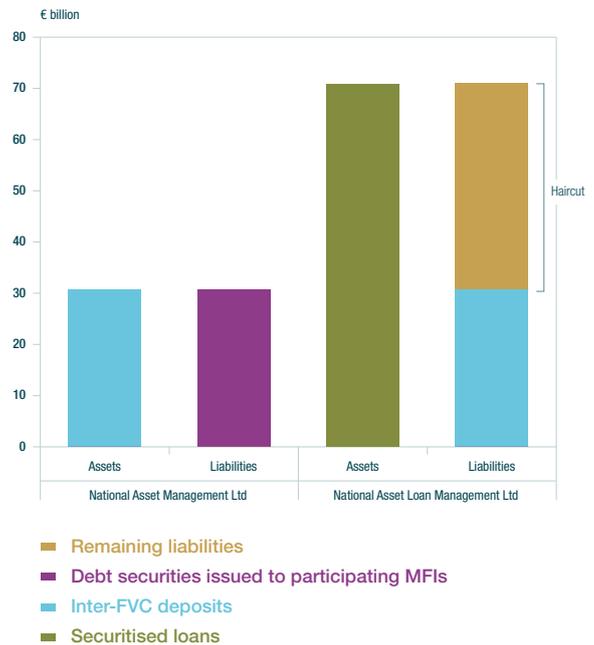
The National Asset Management Agency (NAMA) was set up in 2009 as a means of removing assets – primarily lending to the property and construction sectors – from the balance sheets of five Irish MFIs in order to relieve some uncertainty faced by these institutions in terms of their exposures to problem and non-performing loans. NAMA is charged with the task of maximising the recovery from the loan assets which it has acquired from participating institutions. It is staffed and supported by the national debt management authority, the National Treasury Management Agency (NTMA).

The structure comprises a number of entities including two FVCs – National Asset Management Ltd, which issues debt securities (with a State guarantee) and National Asset Loan Management Ltd, which holds the loans transferred from the MFIs. The NAMA entities are owned by a holding company, National Asset Management Agency Investment Ltd, which is part of the other financial intermediary sector, and is 51 per cent owned by financial institutions and 49 per cent owned by the Government.

The transfer of loans to NAMA commenced in the first quarter of 2010, and is now almost completed. The nominal amount of loans outstanding which were transferred to NAMA were €71 billion and they were exchanged for debt securities of €31 billion; the difference reflects the haircut (on average 58 per cent) applied to the loans at the time of transfer.

The transfer of loans to NAMA was captured by the reporting requirements for MFIs on securitisations and other transfers, allowing credit growth figures to be adjusted to take account of these large movements. The impact of the transfers on MFI data has been significant in domestic credit aggregates⁵. The NAMA entities also constitute a large part of the FVC sector as a whole, and the related transfers of assets and debt securities issuance played a dominant role in developments in the sector in Ireland, with a noticeable impact at the euro area aggregate level.

Chart 8: Summarised Balance Sheets of the NAMA FVCs, end-Q1 2011



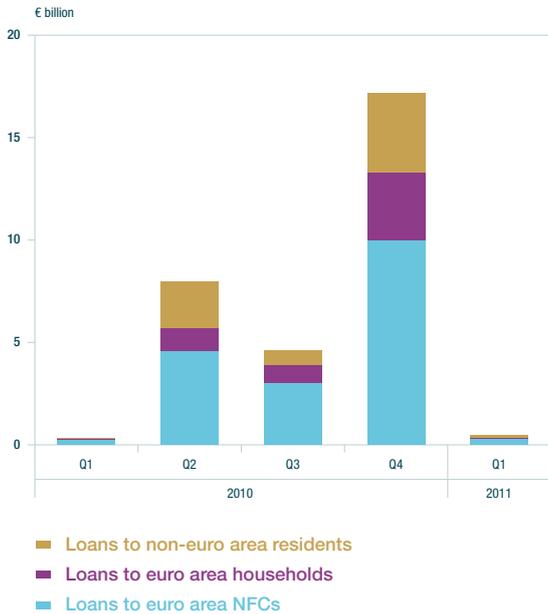
Source: Central Bank of Ireland.

In line with the Regulation, securitised loans on the balance sheet are reported at the nominal amount of principal outstanding. The FVC Regulation states that where a loan has been purchased by the FVC at a price which is below the nominal amount outstanding on the balance sheet of the originator, such as in the case of NAMA, then the revaluation counterpart should be reported in remaining liabilities. The NAMA structure uses separate vehicles for holding the assets and issuing the securities, in common with many other securitisation transactions. Consequently, there are inter-FVC positions which must be taken into account. The vehicle which is issuing the securities must record an equivalent asset (equal to the size of the haircuts applied) recorded as a deposit in the vehicle which is holding the loans (almost €31 billion in Q1 2011). The counterpart vehicle records the deposit as a liability⁶. Therefore, NAMA impacts significantly on the aggregated balance sheet, and a number of asset and liability categories for the FVC sector, including remaining liabilities, where the substantial haircuts are recorded (Chart 8).

⁵ Central Bank of Ireland, 2010: *The Impact of NAMA on Central Bank Statistics*, Box A.

⁶ Such inter-FVC positions are properly identified within the FVC reporting scheme so that they may be consolidated in order to get a more correct view of securitisation activity involving multiple FVCs for single transactions.

Chart 9: Securitised Loans Originated by Euro Area MFIs Transferred to NAMA (at transaction value)



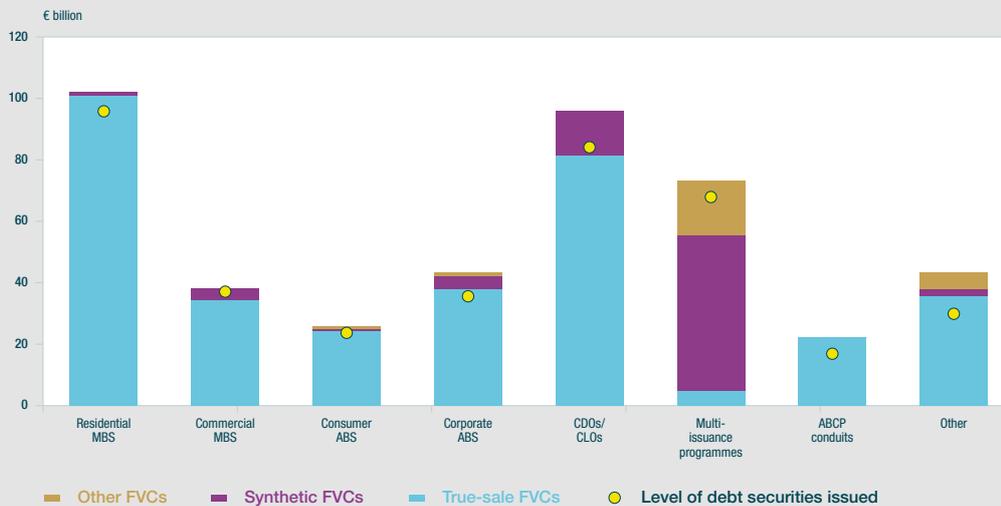
Source: Central Bank of Ireland.

The total amount of securitised loans originated by euro area MFIs transferred to NAMA is presented in Chart 9. The main impact is seen in loans issued to the euro area NFC sector, which includes the property development and construction sectors. A smaller portion relates to lending to the euro area household sector. A significant amount of the securitised loans were to non-euro area residents in Q2 and Q4 2010, which include the lending extended by the guaranteed banks to UK or US residents which have been transferred to NAMA.

Box 2: The Diverse Activities of Resident FVCs

In order to provide more information on the diverse activities of domestic FVCs, they were asked to allocate themselves to a number of different types of vehicle (Box 2, Chart 1). Where these types were not provided or where they were unclear, other sources such as rating agencies were used to determine the nature of the vehicle. Although it is not envisaged to regularly publish balance sheet and transactions data according to these classifications, they allow an overview of the heterogeneous nature of the FVC sector in Ireland, and also contribute to a better understanding of developments in the sector.

Box 2, Chart 1: Total Assets of FVCs by Activity and Debt Securities Issued, end-Q1 2011^a



^a Chart excludes NAMA data.

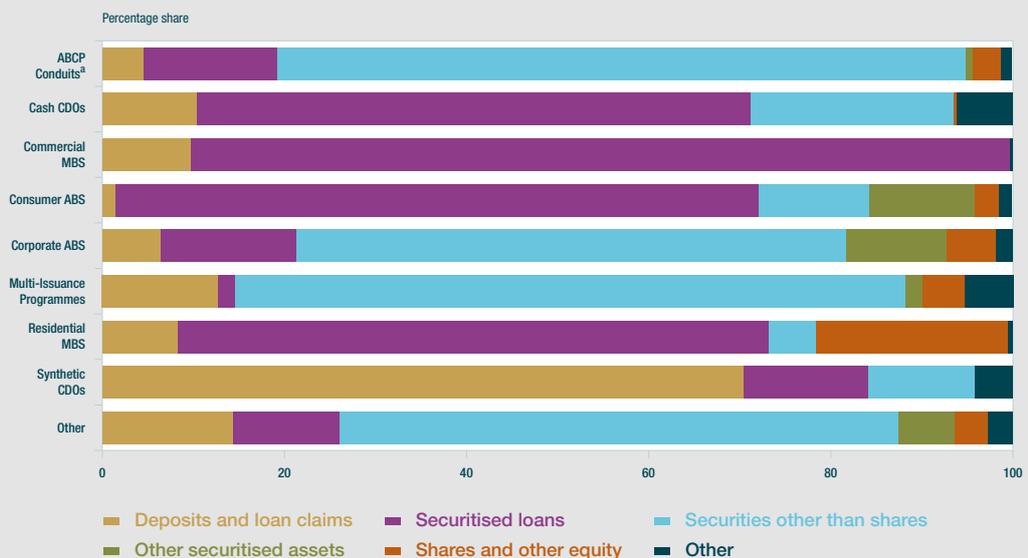
Source: Central Bank of Ireland.

Box 2: The Diverse Activities of Resident FVCs

A large part of securitisation is mortgage backed. Residential mortgage-backed securities (RMBS) are the largest category in terms of assets, amounting to €102 billion, of which most are traditional securitisations, and 7 per cent relate to synthetic securitisations. A breakdown of the assets of RMBS vehicles reflects this, in that the majority of assets on the balance sheet are loans (Box 2, Chart 2). Deposits make up just over 8 per cent of assets, most of which relates to the deposits of synthetic FVCs. Shares and other equity make up a significant share, which are connected with securitisations originated by Portuguese MFIs. These often utilise a Portuguese-resident FVC which issues 'securitisation fund units' (equity) to an Irish-resident FVC which issues the debt securities backed by the Portuguese loans to investors. Securitisations of commercial mortgages (commercial MBS), amounted to €32 billion in Q1 2011, relating in some part to securitisations backed by German assets.

Traditional (also known as 'cash') collateralised debt obligations (CDOs) assets amounted to €80 billion in Q1 2011. So-called 'balance sheet' CDOs are generally set up by an originator in order to securitise a static pool of assets, whereas 'arbitrage' CDOs typically have a collateral manager who selects the investments of the vehicle. CDOs holding securitised loans – also known as collateralised loan obligations (CLOs) – made up over 50 per cent of cash CDOs by assets. These loan holdings include, for example, tranches of syndicated loans which have been originated by MFIs. CDOs holding securities other than shares are often engaged in what is termed 're-securitisation', i.e. they hold debt securities which are the product of a securitisation. In synthetic CDOs – also known as collateralised synthetic obligations (CSOs) – the FVC sells protection against a pool of corporate, sovereign or other credits. The total assets of CDOs amounted to €20 billion in Q2 2011, with the funds raised from investors in CSOs invested in deposits or high grade debt securities.

Box 2, Chart 2: Asset Holdings of FVCs by Activity, end-Q1 2011^a



^a Chart excludes NAMA data.

Source: Central Bank of Ireland.

Box 2: The Diverse Activities of Resident FVCs

A multi-issuance vehicle is a single entity which issues multiple series of notes in which specific assets are contractually ring-fenced to a specific issuance, and are hence bankrupt-remote from each other. These are similar in some respects to vehicles in other jurisdictions in which a 'compartment' issues debt securities linked to a specific pool of assets. There can be a mix of both traditional and synthetic series within one vehicle, so many have not been allocated to either of these types of securitisation.

Other categories include asset-backed commercial paper (ABCP). It is more usual for the assets underlying the issuance of the short-term commercial paper to be held by the Irish-resident FVC, but the issuance of the paper itself may happen in another jurisdiction – e.g. the United States. Corporate asset-backed securities (ABSs) are securitisations of loans to NFCs, which in most cases are outside the euro area. Assets underlying consumer ABSs include credit card receivables and car loans.

Conclusion

The new data helps address some of the data gaps arising from financial innovation and the development of new instruments and vehicles in the years preceding the crisis. They also show how bank balance sheets have changed in response to the closure of securitisation markets. Enhanced statistics on securitisation by MFIs and the new statistics on FVCs fill a data gap from the viewpoint of policy makers and analysts, particularly in terms of improving understanding of credit developments and risk transfer. Despite the freezing of the asset-backed markets in the crisis, the statistics have been valuable in monitoring credit developments in a period of volatility in bank balance sheets due to retained securitisations and transfers to 'bad bank' structures. The high degree of diversity and complexity within the FVC sector will continue to present challenges from an analytical point of view. However, the new statistics provide significant new information for policy makers, and when augmented with other data sources offer the opportunity to better understand the role of securitisation vehicles in financial intermediation and global financial markets.

References

- Addison-Smyth, D., K. McQuinn and G. O'Reilly (2009). *Modelling Credit in the Irish Mortgage Market*, Central Bank Research Technical Paper.
<http://www.centralbank.ie/publications/Documents/9RT09.pdf>
- Doyle, N. (2009). 'Housing Finance Developments in Ireland', *Central Bank Quarterly Bulletin 2009*, 4.
<http://www.centralbank.ie/publications/Documents/2009%20No.%204%20Signed%20Article%20-%20Housing%20Finance%20Developments%20in%20Ireland.pdf>
- Central Bank of Ireland (2010) 'Monetary and Financial Developments, Box A: The Impact of NAMA on Central Bank Statistics', *Central Bank Quarterly Bulletin 2010*, 2.
<http://www.centralbank.ie/publications/Documents/Quarterly%20Bulletin%20Q2%202010.pdf>

Statistical Appendix

Section A: Money and Banking 3

A.1	Summary Irish Private Sector Credit and Deposits	4
A.2	Financial Statement of the Central Bank of Ireland	6
A.4	Credit Institutions – Aggregate Balance Sheet	8
A.4.1	Credit Institutions (Domestic Group) – Aggregate Balance Sheet	10
A.14	Credit Advanced to Irish Resident Private-Sector Enterprises	12
A.16	Deposits from Irish Resident Private-Sector Enterprises	16
A.18	Credit Advanced to and Deposits from Irish Private Households	18
A.19.1	All Credit Institutions: International Business: Analysis by Currency and Sector	20
A.19.2	All Credit Institutions: International Business: Analysis by Geographic Area	22
A.20.1	Money Market Funds – Monthly Aggregate Balance Sheet	24
A.20.2	Money Market Funds – Currency Breakdown of Assets	25

Section B: Interest Rates 27

B.1.1	Retail Interest Rates – Deposits, Outstanding Amounts	29
B.1.2	Retail Interest Rates – Loans, Outstanding Amounts	30
B.2.1	Retail Interest Rates and Volumes – Loans and Deposits, New Business	32
B.3	Official and Selected Interest Rates	34

Section C: Other Financial Data 35

C.1	Investment Funds – Aggregate Balance Sheet	36
C.2.1	Securities Issues Statistics: Debt Securities	38
C.2.2	Securities Issues Statistics: Equities	42

Section D: Quarterly Financial Accounts 45

D.1	Financial Balance Sheet By Sector, Summary	47
D.1.1	Financial Balance Sheet By Sector, Detail	48
D.1.2	Financial Transactions By Sector, Detail	50

Section E: Public Finances and Competitiveness Indicators 53

E.1	Government Debt	54
E.2	Irish Government Long-Term Bonds – Nominal Holdings	55
E.3	Harmonised Competitiveness Indicators for Ireland (HCIs)	56
E.3 (contd.)	Harmonised Competitiveness Indicators for Ireland (HCIs)	57
E.4	Indices of Relative Wage Costs in Manufacturing Industry	58

Section A

Money and Banking

Table A.1: Summary Irish Private Sector Credit and Deposits

	Credit Advanced to Irish Private sector						
	Households				Non-financial corporations		
		Loans for house purchase	Consumer credit	Other loans		Loans	Securities
	1	2	3	4	5	6	7
Outstanding amounts – € million							
2010							
May	135,707	108,224	21,857	5,626	128,538	127,620	918
June	140,188	107,676	21,437	11,076	119,376	118,467	909
July	139,200	107,385	20,705	11,110	113,830	112,934	897
August	139,078	107,411	20,604	11,063	109,969	109,057	912
September	139,096	107,813	20,400	10,883	107,754	106,861	894
October	138,165	107,524	20,028	10,613	104,100	103,355	745
November	137,593	107,127	19,767	10,699	94,706	93,955	751
December	130,318	99,578	19,950	10,790	92,562	92,431	131
2011							
January	129,370	99,289	18,609	11,473	92,652	92,524	129
February	131,001	99,080	18,531	13,390	91,096	90,965	131
March	130,520	98,851	18,272	13,397	90,035	89,912	124
April	129,921	98,627	17,922	13,373	89,045	88,923	122
May	129,510	98,371	17,783	13,356	89,069	88,846	123
Transactions – € million							
2010							
May	-253	-167	-73	-13	358	360	-1
June	-1,493	-98	-453	-942	1,049	1,054	-5
July	-703	-149	-568	15	-549	-549	-1
August	-278	-197	-84	3	-496	-496	-
September	-279	-86	-158	-35	-404	-404	-
October	-767	-192	-386	-189	-460	-317	-143
November	-193	-212	-271	291	-190	-184	-6
December	-494	-179	-321	6	-723	-636	-87
2011							
January	-674	-284	-384	-5	-12	-26	14
February	-298	-212	-78	-8	-107	-104	-2
March	-385	-147	-206	-32	-11	-4	-7
April	-570	-214	-341	-15	-707	-708	1
May	-449	-262	-156	-31	-93	-87	-6
Growth rates – per cent							
2010							
May	-3.1	-1.3	-10.1	-7.2	-2.8	-2.4	-36.7
June	-4.5	-1.5	-13.1	-22.4	-0.9	-0.5	-36.4
July	-4.7	-1.6	-14.3	-22.1	-1.1	-0.8	-34.7
August	-4.2	-1.2	-13.8	-21.9	-1.1	-0.8	-35.4
September	-4.5	-1.6	-14.1	-20.6	-2.0	-1.6	-42.8
October	-4.8	-1.6	-14.9	-23.1	-2.3	-1.8	-50.9
November	-4.8	-1.7	-15.8	-20.5	-2.4	-1.9	-48.9
December	-5.3	-2.1	-17.0	-21.0	-2.2	-1.8	-39.3
2011							
January	-5.1	-2.3	-15.6	-20.9	-1.7	-1.4	-30.1
February	-5.1	-2.7	-14.5	-18.7	-1.8	-1.5	-27.3
March	-5.0	-2.6	-14.9	-16.2	-1.5	-1.3	-27.1
April	-4.6	-2.0	-15.3	-16.6	-2.5	-2.3	-23.9
May	-4.8	-2.1	-15.7	-16.6	-2.8	-2.6	-27.4

Table A.1 – continued

Insurance corporations and pension funds/Other financial intermediaries			Irish Private Sector Deposits				
			Total				
	Loans	Securities		Households	Non-financial corporations	Insurance corporations and pension funds/Other financial intermediaries	
8	9	10	11	12	13	14	
							Outstanding amounts – € million
							2010
94,920	40,297	54,622	183,987	97,891	36,980	49,116	May
95,755	41,168	54,587	180,420	97,253	37,148	46,020	June
96,354	39,879	56,475	179,345	97,184	36,383	45,778	July
98,084	40,367	57,717	178,696	96,470	36,469	45,757	August
96,164	38,653	57,512	175,259	96,221	34,937	44,101	September
98,273	38,381	59,891	176,695	96,242	35,255	45,198	October
105,625	40,331	65,294	172,161	93,951	35,277	42,933	November
111,718	38,559	73,160	168,299	94,620	33,537	40,141	December
							2011
110,668	37,707	72,961	166,912	93,957	33,578	39,377	January
110,197	37,914	72,284	165,163	93,259	33,213	38,691	February
110,140	37,047	73,093	162,983	92,803	32,151	38,029	March
105,731	34,916	70,815	164,937	92,813	31,580	40,544	April
113,345	43,212	70,133	172,495	92,133	31,655	48,707	May
							Transactions – € million
							2010
3,159	-271	3,430	-1,609	-607	207	-1,209	May
123	7	117	-1,844	-581	8	-1,271	June
1,664	-317	1,981	-443	-16	-547	121	July
1,681	39	1,641	-948	-743	-17	-187	August
-621	-446	-176	-2,661	-180	-1,246	-1,235	September
2,404	16	2,387	1,578	34	372	1,172	October
6,204	907	5,297	-5,205	-2,353	-221	-2,631	November
5,651	-1,718	7,369	-2,971	572	-680	-2,864	December
							2011
-855	-607	-249	-1,202	-472	-79	-652	January
-439	-4	-434	-1,750	-734	-319	-697	February
-471	-363	-108	-1,833	-424	-929	-480	March
-2,171	-1,600	-570	2,283	37	-292	2,538	April
-838	-186	-652	-752	-709	-36	-8	May
							Growth rates – per cent
							2010
10.1	-10.7	33.0	2.0	-0.8	-5.1	14.9	May
9.3	-11.3	31.9	0.8	-1.3	-6.3	12.0	June
12.7	-10.3	37.8	-0.1	-1.8	-9.2	12.1	July
8.7	-9.4	25.7	-1.9	-3.0	-13.1	11.3	August
9.9	-8.8	27.3	-3.6	-1.9	-14.8	2.8	September
13.3	-8.2	33.4	-4.1	-2.4	-15.4	2.5	October
21.3	-5.0	45.8	-6.7	-4.5	-14.9	-4.3	November
27.4	-9.9	62.6	-7.6	-4.7	-16.1	-6.5	December
							2011
27.3	-10.5	62.8	-8.0	-5.5	-15.3	-7.1	January
24.5	-9.5	54.5	-9.8	-6.1	-14.3	-14.2	February
25.3	-7.8	53.8	-10.0	-5.4	-10.6	-19.0	March
18.1	-10.8	40.8	-9.1	-5.6	-10.3	-15.2	April
13.2	-10.6	30.7	-8.7	-5.7	-10.9	-13.1	May

Table A.2: Financial Statement of the Central Bank of Ireland

Assets									
		Gold and Receivables	Lending to euro area credit institutions relating to monetary policy operations in euro						
			Main refinancing operations	Longer-term refinancing operations	Fine-tuning reverse operations	Structural reverse operations	Marginal lending facility	Credits related to margin calls	
Outstanding amounts - € million									
2010									
25 June	129,636	159	94,790	17,379	76,853	-	-	558	-
30 July	125,101	195	89,456	32,285	57,171	-	-	-	-
27 August	130,410	195	95,061	31,400	62,671	-	-	990	-
24 September	161,368	195	119,106	55,235	62,671	-	-	1,200	-
29 October	185,815	185	130,039	61,510	68,529	-	-	-	-
26 November	202,401	185	136,436	62,135	73,764	-	-	537	-
31 December	204,453	204	132,010	63,655	56,025	12,330	-	-	-
2011									
28 January	198,522	204	126,010	56,110	69,900	-	-	-	-
25 February	208,431	204	116,924	33,445	66,390	-	-	17,089	-
25 March	202,725	204	114,495	26,935	84,170	-	-	3,390	-
29 April	181,656	194	106,130	23,730	82,400	-	-	-	-
27 May	177,445	194	102,345	26,490	75,805	-	-	50	-
24 June	180,067	194	103,000	30,620	72,180	-	-	200	-
Liabilities									
		Banknotes in circulation	Liabilities to euro area credit institutions relating to monetary policy operations in euro					Other liabilities to euro area credit institutions in euro	
			Current accounts (covering the minimum reserve system)	Deposit facility	Fixed-term deposits	Deposits related to margin calls	Fine-tuning reverse operations		
Outstanding amounts - € million									
2010									
25 June	129,636	11,877	13,083	11,673	1,410	-	-	-	-
30 July	125,101	12,013	16,021	10,226	5,795	-	-	-	-
27 August	130,410	12,028	12,116	9,991	1,442	683	-	-	-
24 September	161,368	11,952	12,534	7,346	3,467	1,721	-	-	-
29 October	185,815	11,932	14,627	11,475	652	2,500	-	-	-
26 November	202,401	12,206	8,196	6,086	110	2,000	-	-	-
31 December	204,453	12,293	11,414	8,264	3,150	-	-	-	-
2011									
28 January	198,522	11,589	9,577	8,577	-	1,000	-	-	-
25 February	208,431	12,038	8,787	7,517	20	1,250	-	-	-
25 March	202,725	11,999	7,541	6,241	100	1,200	-	-	-
29 April	181,656	12,186	8,329	5,722	600	2,000	7	-	-
27 May	177,445	12,012	6,201	4,837	164	1,200	-	-	-
24 June	180,067	12,226	8,249	8,140	109	-	-	-	-

Table A.2 – continued

Assets

Other claims on euro area credit institutions in euro	Claims on euro area residents in foreign currency	Claims on non-euro area residents in euro	Claims on non-euro area residents in foreign currency	Securities of other euro area residents in euro	General Government debt in euro	Other assets
261	137	1,282	1,477	17,219	–	14,311
495	161	1,516	1,576	16,951	–	14,751
473	181	1,388	1,558	17,176	–	14,378
313	148	1,142	1,555	17,714	–	21,195
721	135	1,118	1,399	17,612	–	34,606
463	107	1,334	1,429	17,773	–	44,674
514	142	883	1,382	18,224	–	51,094
501	113	1,022	1,412	18,138	–	51,122
195	142	1,341	1,380	18,177	–	70,068
348	205	1,169	1,353	18,161	–	66,790
598	185	861	1,274	18,268	–	54,146
483	200	1,076	1,264	18,184	–	53,699
343	181	1,157	1,285	18,241	–	55,666

Liabilities

Debt certificates issued	Liabilities to other euro area residents in euro	Liabilities to non-euro area residents in euro	Liabilities to euro area residents in foreign currency	Liabilities to non-euro area residents in foreign currency	Counterpart of Special Drawing Rights allocated by the IMF	Revaluation Accounts	Capital and reserves	Other liabilities
–	24,898	10	–	–	874	237	1,531	77,126
–	24,483	27	–	–	934	264	1,531	69,828
–	26,714	27	–	–	934	264	1,531	76,796
–	25,919	15	–	–	934	264	1,531	108,219
–	23,716	12	–	–	884	225	1,531	132,888
–	26,438	15	–	–	884	225	1,531	152,906
–	15,890	10	–	–	897	229	1,531	162,189
–	23,983	22	–	–	897	229	1,531	150,694
–	25,639	22	–	–	897	229	1,697	159,122
–	23,070	22	–	–	897	229	1,720	157,247
–	8,359	22	–	–	865	201	1,723	149,971
–	7,915	20	–	–	865	201	1,723	148,508
–	10,328	26	–	–	865	201	1,723	146,449

Table A.4 – continued

Loans to non-residents		Holdings of securities issued by non-residents		Central bank balances		Remaining assets		
Euro area	Rest of the world	Euro area	Rest of the world	Resident	Non-resident	Resident	Non-resident	
24	107	131	145	28	29	30	31	
								Outstanding amounts – € million
								2010
89,233	275,860	141,897	173,051	13,095	174	28,638	38,033	May
90,265	283,665	138,786	170,699	10,124	3	34,623	36,486	June
88,174	269,019	136,698	162,980	17,392	2	34,384	35,295	July
93,471	283,596	137,478	166,672	9,986	2	26,947	40,393	August
98,773	263,195	133,156	158,121	11,560	102	24,067	36,924	September
153,757	235,598	104,396	108,923	15,800	2	23,323	33,119	October
125,849	249,412	119,316	103,181	11,740	2	34,328	33,011	November
114,793	229,328	85,927	99,489	12,319	–	27,537	29,421	December
								2011
111,402	214,568	82,876	96,455	9,396	–	28,323	28,197	January
108,564	209,430	80,491	94,935	9,161	–	28,666	28,055	February
114,425	197,484	78,573	89,303	10,272	–	31,035	27,047	March
115,521	188,947	76,756	85,841	9,241	–	32,816	27,086	April
109,820	193,037	77,897	88,184	9,168	–	34,686	27,583	May

Deposits from non-residents		Capital & reserves		Borrowing from the Eurosystem relating to monetary policy operations	Remaining liabilities		
Euro area	Rest of the world	Resident	Non-resident		Resident	Non-resident	
39	40	41	42	43	45	46	
							Outstanding amounts – € million
							2010
223,587	314,698	54,908	32,043	90,473	40,819	44,360	May
226,949	312,566	62,133	30,346	92,340	40,109	45,819	June
226,149	306,975	60,643	29,864	89,454	36,783	43,911	July
228,358	313,361	59,054	29,826	95,062	36,692	52,982	August
215,333	292,055	57,868	29,526	121,138	47,912	44,697	September
179,938	272,475	57,129	29,302	130,039	51,513	42,013	October
178,122	247,289	63,022	27,106	138,199	69,690	42,915	November
151,799	195,287	84,793	26,304	132,010	72,924	38,474	December
							2011
153,336	180,885	79,838	25,684	126,010	77,297	35,436	January
147,882	171,235	82,568	25,210	116,137	93,207	34,086	February
145,118	166,106	79,980	23,932	111,120	97,328	31,495	March
135,611	163,391	81,307	23,843	106,130	80,676	32,552	April
133,141	167,116	84,149	23,639	102,335	83,727	33,762	May

Table A.4.1 – continued

Loans to non-residents		Holdings of securities issued by non-residents		Central bank balances		Remaining assets		
Euro area	Rest of the world	Euro area	Rest of the world	Resident	Non-resident	Resident	Non-resident	
24	107	131	145	28	29	30	31	
								Outstanding amounts – € million
								2010
11,428	157,650	22,541	50,758	9,658	2	23,995	11,414	May
10,904	161,884	22,198	50,086	6,168	2	30,458	10,590	June
10,335	157,269	21,709	48,159	11,922	2	30,554	10,226	July
10,677	159,438	21,860	48,191	7,582	2	23,482	10,737	August
9,816	150,200	21,069	45,856	9,524	2	19,775	10,167	September
10,251	145,727	19,676	46,444	12,491	2	20,161	9,785	October
10,698	154,354	19,094	38,994	9,738	2	30,598	9,591	November
9,267	141,963	17,601	37,612	8,293	–	23,878	8,512	December
								2011
9,425	128,791	15,700	37,105	6,814	–	25,105	8,123	January
9,109	124,536	16,090	37,053	7,436	–	25,278	8,386	February
9,459	117,211	15,085	35,022	8,434	–	27,888	8,836	March
11,445	113,244	13,370	34,161	7,720	–	29,528	8,639	April
8,716	193,717	12,950	34,238	7,513	–	28,042	8,426	May
								Outstanding amounts – € million
								2010
25,018	193,937	34,950	11,624	59,523		32,464	16,510	May
24,183	192,759	41,179	11,314	59,811		35,103	16,250	June
29,799	194,251	40,290	10,991	58,319		32,620	15,808	July
29,644	193,129	38,255	10,938	60,419		32,356	18,281	August
24,374	178,470	37,847	11,186	82,988		43,392	14,478	September
22,428	170,614	37,150	10,882	85,654		48,021	15,123	October
17,618	155,013	41,917	8,655	97,319		65,877	15,529	November
16,216	121,065	63,522	7,842	94,550		69,485	13,452	December
								2011
17,143	108,965	59,043	7,004	96,050		74,106	12,200	January
17,118	99,119	61,707	6,772	88,697		89,739	10,557	February
16,428	93,821	59,415	6,044	82,775		94,034	9,534	March
15,104	91,952	61,172	5,992	77,790		77,524	9,940	April
14,151	91,105	62,523	5,615	74,445		77,074	10,123	May

Table A.14: Credit Advanced to Irish Resident Private-Sector Enterprises

		Outstanding amounts – € million				
		Mar-10	Jun-10	Sep-10	Dec-10	Mar-11
1. Primary Industries		5,249	5,539	5,486	5,343	5,316
1.1	Agriculture	4,326	4,631	4,595	4,503	4,465
	1.1.1 Growing of crops, market gardening, horticulture	..	..	..	483	491
	1.1.2 Farming of animals	..	..	..	2,896	2,872
	1.1.3 Other agricultural activities	..	..	..	1,124	1,102
1.2	Forestry, logging, mining and quarrying	605	598	575	488	506
1.3	Fishing and aquaculture	318	310	316	352	345
2. Manufacturing		6,296	6,198	5,718	5,268	5,130
2.1	Manufacture of food, beverages and tobacco products	..	..	..	2,440	2,153
2.2	Wood, pulp, paper, paper products, printing and reproduction of recorded media	..	..	..	635	637
2.3	Chemicals, rubber/plastic products, other non-metallic mineral products	..	..	..	707	746
2.4	Pharmaceutical products and preparations, medical and dental instruments and supplies	..	..	..	81	109
2.5	Fabricated metal products, except machinery and equipment	..	..	..	76	127
2.6	Computer, electronic and optical products	..	..	..	79	91
2.7	Production, installation and repair of commercial machinery/equipment, not including computers	..	..	..	415	423
2.8	Other manufacturing	..	..	..	835	845
3. Electricity, Gas, Steam and Air Conditioning Supply		748	777	622	982	1,046
4. Water Supply, Sewerage, Waste Management and Remediation Activities		120	122	107	128	129
5. Construction		5,010	4,719	4,248	3,289	3,383
5.1	Construction of buildings carried out on contract	..	..	..	1,634	1,550
5.2	Civil engineering activities carried out on contract	..	..	..	571	717
5.3	Other construction activities	..	..	..	1,084	1,116
6. Wholesale/Retail Trade & Repairs		11,891	11,747	11,493	9,720	9,506
6.1	Sale, maintenance/repair of motor vehicles, retail sale of fuel	1,950	1,911	1,794	1,692	1,646
6.2	Wholesale trade and commission trade (except vehicles)	2,552	2,482	2,383	1,745	1,646
6.3	Retail trade (except vehicles), repair of personal/household goods	6,157	6,059	6,022	5,305	5,267
6.4	Other wholesale/retail	1,231	1,294	1,294	978	946
7. Transportation and Storage		2,423	2,544	2,270	1,568	1,639
7.1	Land, water and air transport	..	..	..	957	994
7.2	Postal, courier, warehousing and support activities for transportation	..	..	..	306	310
7.3	Other transportation and storage	..	..	..	304	336
8. Hotels and Restaurants		10,578	9,970	9,418	7,949	8,107
8.1	Hotels	6,172	5,683	5,190	4,218	4,434
8.2	Restaurants	745	711	693	619	618
8.3	Bars	3,131	3,035	2,993	2,746	2,689
8.4	Other accommodation and catering	530	541	542	367	366
9. Information and Communication		647	651	621	636	638
9.1	Publishing of printed material	..	..	..	210	182
9.2	Audio-visual production and publishing, programming and broadcasting activities	..	..	..	46	51
9.3	Telecommunications and information service activities	..	..	..	266	262
9.4	Software publishing, computer programming, consultancy and related activities	..	..	..	113	142
9.5	Other information and communication	..	..	..	1	1

* For metadata and explanatory notes see: http://www.centralbank.ie/polstats/stats/cmab/Documents/Business_Credit_and_Deposits_Explanatory_Notes_Jun11.pdf.

** For commentary on most recent developments see: <http://www.centralbank.ie/polstats/stats/cmab/Pages/releases.aspx>.

Table A.14 – continued

Transactions – € million					Annual Growth rates – per cent.				
Mar-10	Jun-10	Sep-10	Dec-10	Mar-11	Mar-10	Jun-10	Sep-10	Dec-10	Mar-11
-209	440	82	-104	-7	-9.5	0.6	1.9	3.9	7.8
-190	426	76	-99	-17	-7.8	1.9	3.8	4.8	8.8
..	..	..	..	9	..	..	..	..	..
..	..	..	..	-5	..	..	..	..	..
..	..	..	..	-21	..	..	..	..	..
-13	14	-8	-9	18	-20.0	-3.2	-7.3	-2.7	3.0
-5	1	14	4	-7	-8.2	-7.9	-4.7	4.6	4.1
-415	111	-348	-103	-83	-13.8	-4.7	-9.5	-11.4	-7.2
..	..	..	..	-235	..	..	..	..	..
..	..	..	..	3	..	..	..	..	..
..	..	..	..	38	..	..	..	..	..
..	..	..	..	28	..	..	..	..	..
..	..	..	..	51	..	..	..	..	..
..	..	..	..	13	..	..	..	..	..
..	..	..	..	8	..	..	..	..	..
..	..	..	..	11	..	..	..	..	..
-300	53	-140	403	64	-30.8	-9.7	-33.3	3.9	54.1
-36	6	-13	1	1	-20.5	-15.5	-29.7	-26.9	-4.6
-392	-170	-146	-1,905	133	-27.6	-25.4	-24.3	-51.9	-46.3
..	..	..	..	-48	..	..	..	..	..
..	..	..	..	147	..	..	..	..	..
..	..	..	..	34	..	..	..	..	..
-307	258	91	-492	-186	-6.3	0.4	1.2	-3.9	-3.3
-7	38	-65	42	-38	-5.1	2.9	-0.4	0.4	-1.5
-190	21	-21	-129	-96	-16.3	-6.7	-8.2	-11.8	-10.6
-149	80	128	-171	-21	-4.0	-0.2	1.4	-1.8	0.1
39	119	47	-234	-31	4.9	16.2	25.6	-3.9	-9.9
-69	211	-210	-71	140	-6.1	3.3	-6.0	-6.0	5.2
..	..	..	..	87	..	..	..	..	..
..	..	..	..	10	..	..	..	..	..
..	..	..	..	45	..	..	..	..	..
123	-144	-195	-242	234	3.6	2.2	-1.2	-4.7	-3.0
124	-153	-255	-247	240	3.8	1.3	-5.2	-9.5	-6.2
23	-13	4	11	1	3.3	2.9	3.7	3.5	0.5
17	-3	43	55	-8	2.3	2.6	4.3	3.7	2.9
-40	26	13	-60	-1	10.6	9.8	6.3	-11.0	-4.7
-135	20	-9	140	-3	-30.1	-27.0	-20.9	3.5	24.0
..	..	..	..	-28	..	..	..	..	..
..	..	..	..	-2	..	..	..	..	..
..	..	..	..	-3	..	..	..	..	..
..	..	..	..	29	..	..	..	..	..
..	..	..	..	0	..	..	..	..	..

Table A.14 – continued

	Outstanding amounts – € million				
	Mar-10	Jun-10	Sep-10	Dec-10	Mar-11
10. Financial Intermediation (Excl. Monetary Financial Institutions)	83,857	93,238	93,318	109,179	107,865
10.1 Financial leasing	..	..	..	1,485	1,674
10.2 Non-bank credit grantors, excluding credit unions	..	..	..	12,851	10,912
10.3 Investment funds, excluding financial vehicle corporations and money market funds	..	..	..	419	828
10.4 Financial vehicle corporations (FVCs)	..	..	..	57,924	43,096
10.5 Life insurance	..	..	..	4,480	4,494
10.6 Pension funding	..	..	..	84	74
10.7 Non-life insurance	..	..	..	274	150
10.8 Security broker/fund management	..	..	..	4,565	4,255
10.9 Other financial intermediation / Unallocated	..	..	..	27,096	42,382
11. Real Estate, Land and Development Activities	89,078	76,535	67,999	55,361	55,265
11.1 Property investment/development of residential real estate	..	..	..	19,130	16,254
11.2 Property investment/development of commercial real estate	..	..	..	15,456	17,266
11.3 Property investment/development of mixed real estate	..	..	..	16,422	17,348
11.4 Investment in unzoned land	..	..	..	1,010	998
11.5 Other real estate activities	..	..	..	3,344	3,399
12. Business and Administrative Services	5,728	4,868	4,736	5,522	5,134
12.1 Legal, accounting and management consultant activities	..	..	..	1,591	1,319
12.2 Architectural and engineering activities, technical testing and analysis	..	..	..	162	153
12.3 Scientific research and development	..	..	..	29	29
12.4 Rental and leasing activities, services to buildings and landscape activities	..	..	..	149	136
12.5 Employment, office administration and business support activities	..	..	..	227	285
12.6 Other business and administrative services	..	..	..	3,365	3,212
13. Other Community, Social and Personal Services	2,621	2,522	2,416	1,665	2,289
13.1 Recreational, cultural and sporting activities	..	..	..	896	942
13.2 Membership organisations (business, employers, professional, trade unions, religious, political)	..	..	..	219	317
13.3 Other service activities	..	..	..	550	1,030
14. Education	815	864	785	725	674
15. Human Health and Social Work	2,463	2,461	2,423	2,049	2,062
15.1 Hospitals and medical practice activities	..	..	..	1,380	1,370
15.2 Residential care activities	..	..	..	401	314
15.3 Other health and social work	..	..	..	269	379
16. Extra-Territorial Organisations and Bodies	..	..	..	11	1
17. Total	227,524	222,755	211,660	209,395	208,184
17.1 Total ex Financial Intermediation	143,667	129,517	118,342	100,216	100,319
17.2 Total ex Financial Intermediation and Property Related Sectors	49,579	48,263	46,095	41,566	41,671

* For metadata and explanatory notes see: http://www.centralbank.ie/polstats/stats/cmab/Documents/Business_Credit_and_Deposits_Explanatory_Notes_Jun11.pdf.

** For commentary on most recent developments see: <http://www.centralbank.ie/polstats/stats/cmab/Pages/releases.aspx>.

Table A.14 – continued

Transactions – € million					Annual Growth rates – per cent.				
Mar-10	Jun-10	Sep-10	Dec-10	Mar-11	Mar-10	Jun-10	Sep-10	Dec-10	Mar-11
2,894	7,037	2,365	14,552	-2,265	1.6	10.0	9.5	33.0	25.8
..	..	..	..	188	..	..	..	..	..
..	..	..	..	-1,939	..	..	..	..	..
..	..	..	..	409	..	..	..	..	..
..	..	..	..	-16,155	..	..	..	..	..
..	..	..	..	16	..	..	..	..	..
..	..	..	..	-10	..	..	..	..	..
..	..	..	..	-104	..	..	..	..	..
..	..	..	..	-329	..	..	..	..	..
..	..	..	..	15,660	..	..	..	..	..
45	-186	-319	-109	-166	-1.9	-1.8	-0.4	-0.7	-1.1
..	..	..	..	-426	..	..	..	..	..
..	..	..	..	-54	..	..	..	..	..
..	..	..	..	244	..	..	..	..	..
..	..	..	..	17	..	..	..	..	..
..	..	..	..	53	..	..	..	..	..
161	-23	252	331	-382	-1.0	13.0	1.6	15.2	4.3
..	..	..	..	-268	..	..	..	..	..
..	..	..	..	-9	..	..	..	..	..
..	..	..	..	0	..	..	..	..	..
..	..	..	..	-9	..	..	..	..	..
..	..	..	..	58	..	..	..	..	..
..	..	..	..	-156	..	..	..	..	..
-80	-27	-36	-1,053	-307	-2.9	-3.5	-3.9	-46.6	-55.1
..	..	..	..	-346	..	..	..	..	..
..	..	..	..	30	..	..	..	..	..
..	..	..	..	9	..	..	..	..	..
-16	67	-55	-171	-49	17.7	15.4	1.5	-22.2	-26.1
-114	76	34	-179	24	-2.3	5.1	3.4	-7.3	-2.1
..	..	..	..	-5	..	..	..	..	..
..	..	..	..	-82	..	..	..	..	..
..	..	..	..	111	..	..	..	..	..
..	..	..	..	-10	..	..	..	..	..
1,150	7,729	1,353	10,992	-2,862	-2.3	2.4	2.3	10.0	7.9
-1,744	692	-1,012	-3,560	-597	-4.4	-1.9	-2.1	-4.4	-3.9
-1,397	1,048	-547	-1,546	-564	-5.4	1.1	-2.3	-5.0	-3.8

Table A.16: Deposits from Irish Resident Private-Sector Enterprises

	Outstanding amounts – € million				
	Mar-10	Jun-10	Sep-10	Dec-10	Mar-11
1. Primary Industries	2,706	2,580	2,555	3,030	2,753
2. Manufacturing	5,049	5,622	4,751	4,704	4,585
3. Electricity, Gas, Steam and Air Conditioning Supply	935	807	681	765	566
4. Water Supply, Sewerage, Waste Management and Remediation Activities	202	220	244	45	58
5. Construction	2,830	2,637	2,464	2,282	1,903
6. Wholesale/Retail Trade & Repairs	4,247	4,477	4,150	4,435	4,124
7. Transportation and Storage	3,177	3,181	3,108	2,842	2,294
8. Hotels and Restaurants	620	658	738	665	634
9. Information and Communication	1,352	1,392	1,381	1,062	1,035
10. Financial Intermediation (Excl. Monetary Financial Institutions)	50,758	47,727	45,312	40,395	38,305
11. Real Estate, Land and Development Activities	6,127	6,226	6,000	6,227	4,756
12. Business and Administrative Services	6,047	5,848	5,737	5,041	7,195
13. Other Community, Social and Personal Services	4,715	4,641	4,709	4,473	4,348
14. Education	1,795	1,708	1,763	1,840	1,929
15. Human Health and Social Work	2,271	2,162	1,839	1,174	1,248
16. Extra-Territorial Organisations and Bodies	9	0	0	0	2
17. Total	92,840	89,886	85,432	78,980	75,735

* For metadata and explanatory notes see: http://www.centralbank.ie/polstats/stats/cmab/Documents/Business_Credit_and_Deposits_Explanatory_Notes_Jun11.pdf.

** For commentary on most recent developments see: <http://www.centralbank.ie/polstats/stats/cmab/Pages/releases.aspx>.

Table A.16 – continued

Transactions – € million					Growth rates – per cent.				
Mar-10	Jun-10	Sep-10	Dec-10	Mar-11	Mar-10	Jun-10	Sep-10	Dec-10	Mar-11
-167	-190	-6	491	-277	0.0	-11.6	-10.3	4.1	0.5
-721	536	-812	2	-119	2.1	11.6	-15.7	-17.2	-7.7
95	-140	-118	92	-199	21.4	-29.7	-24.9	-8.2	-39.0
-15	18	24	-190	13	-3.4	-3.4	11.5	-75.1	-65.5
-266	-228	-157	-165	-377	2.2	-6.1	-17.6	-26.3	-32.6
-352	185	-292	169	-311	7.3	6.5	2.5	-6.3	-5.6
-20	-59	-37	-202	-548	-1.3	-6.1	-7.8	-9.9	-26.8
-37	26	86	-149	-31	-6.5	-4.3	4.2	-11.3	-10.4
-294	39	1	-204	-74	-15.3	-14.8	-14.1	-27.9	-18.4
3,821	452	-1,698	-4,247	-2,099	16.8	20.1	3.1	-4.6	-16.4
-1,293	20	-184	305	281	-15.0	-16.9	-20.5	-15.5	6.9
-1,107	-243	-63	-696	2,154	-20.9	-18.3	-18.6	-29.5	19.1
30	-150	91	-236	-125	1.3	-3.9	-0.7	-5.6	-8.9
125	-109	64	99	89	-0.5	-1.0	5.4	10.6	7.9
-8	-129	-313	-607	74	-0.8	-7.6	-22.7	-46.2	-42.6
-1	-9	0	0	2	-24.5	-100.0	..	..	..
-210	19	-3,414	-5,538	-1,547	5.8	6.1	-4.4	-10.2	-11.8

Table A.18: Credit Advanced to and Deposits from Irish Private Households

Total Lending											
Lending for house purchase											
	Floating rate						Fixed rate				
			Standard variable	Tracker	Up to 1 year fixed		Over 1 and up to 3 years	Over 3 and up to 5 years	Over 5 years		
Outstanding amounts – € million											
2009											
December	135,720	110,210	95,137	..	..	..	15,073	6,906	5,715	2,452	
2010											
March	133,020	109,434	93,832	..	..	..	15,603	6,899	5,677	3,026	
June	129,513	107,676	92,160	..	..	..	15,516	7,621	6,318	1,578	
September	128,256	107,813	92,451	..	..	..	15,362	7,338	6,546	1,478	
December	122,185	99,578	86,715	32,073	53,320	1,322	12,863	6,163	5,169	1,531	
2011											
March	119,592	98,851	84,974	30,843	52,880	1,251	13,877	6,774	5,513	1,590	
Transactions – € million											
2009											
December	-630	15	..	..	..	..	..	..	..	..	..
2010											
March	-1,405	-115	..	..	..	..	..	..	..	..	..
June	-2,287	-1,172	..	..	..	..	..	..	..	..	..
September	-1,384	-432	..	..	..	..	..	..	..	..	..
December	1,080	-583	..	..	..	..	..	..	..	..	..
2011											
March	-1,641	-643	-1,664	-1,223	-401	-40	1,021	614	347	60	
Growth rates – per cent.											
2009											
December	-0.7	0.6	..	..	..	..	..	..	..	..	..
2010											
March	-1.9	-0.2	..	..	..	..	..	..	..	..	..
June	-3.8	-1.5	..	..	..	..	..	..	..	..	..
September	-4.2	-1.6	..	..	..	..	..	..	..	..	..
December	-3.0	-2.1	..	..	..	..	..	..	..	..	..
2011											
March	-3.3	-2.6	..	..	..	..	..	..	..	..	..

* For metadata and explanatory notes see: http://www.centralbank.ie/polstats/stats/cmab/Documents/Private_Households_Credit_and_Deposits_Explanatory_Notes_Jun11.pdf.

** For commentary on most recent developments see: <http://www.centralbank.ie/polstats/stats/cmab/Pages/releases.aspx>.

Table A.18 – continued

Total Lending			Total Deposits	
Other personal				
	Finance for investment	Finance for other purposes		
Outstanding amounts – € million				
2010				
25,510	2,211	23,299	94,109	December
2010				
23,585	2,064	21,521	93,411	March
21,837	1,927	19,910	92,722	June
20,443	1,709	18,734	91,371	September
22,607	2,864	19,743	89,217	December
2011				
20,741	2,854	17,887	87,455	March
Transactions – € million				
2010				
-645	-267	-378	1,103	December
2010				
-1,290	-81	-1,209	-865	March
-1,115	3	-1,118	-891	June
-952	-125	-827	-1,229	September
1,663	95	1,568	-1,959	December
2011				
-998	-77	-921	-1,696	March
Growth rates – per cent.				
2010				
-6.1	-40.2	0.7	0.5	December
2010				
-8.9	-35.2	-5.0	-0.5	March
-12.9	-10.1	-13.1	-2.6	June
-15.6	-18.4	-15.2	-2.0	September
-6.5	-4.8	-6.6	-5.2	December
2011				
-5.8	-3.8	-6.1	-6.2	March

Table A.19.1: All Credit Institutions: International Business: Analysis by Currency and Sector

	31 December 2010	31 March 2011
Assets		
1. Analysis by currency		
<i>Irish residents in non-euro</i>	50,955	39,241
US Dollar	23,314	18,380
Sterling	21,102	16,834
Other	6,539	4,028
<i>Non-residents in non-euro</i>	273,698	238,406
US Dollar	101,655	92,329
Sterling	141,986	116,801
Other	30,057	29,277
Non-residents in euro	247,340	233,125
2. Analysis by sector		
<i>Irish residents in non-euro</i>		
Monetary financial institutions	18,403	9,244
Non-monetary financial institutions	32,552	29,997
<i>Non-residents in non-euro</i>		
Monetary financial institutions	144,545	121,093
Non-monetary financial institutions	129,153	117,313
<i>Non-residents in euro</i>		
Monetary financial institutions	124,170	123,655
Non-monetary financial institutions	123,170	109,470
3. Total international business	571,992	510,772

Table A.19.1 – continued

	31 December 2010	31 March 2011
Liabilities		
1. Analysis by currency		
<i>Irish residents in non-euro</i>	36,146	25,931
US Dollar	16,400	12,933
Sterling	13,028	8,972
Other	6,718	4,027
<i>Non-residents in non-euro</i>	201,781	170,840
US Dollar	79,989	72,322
Sterling	95,857	73,740
Other	25,936	24,778
<i>Non-residents in euro</i>	234,082	218,689
2. Analysis by sector		
<i>Irish residents in non-euro</i>		
Monetary financial institutions	19,999	11,050
Non-monetary financial institutions	16,147	14,881
<i>Non-residents in non-euro</i>		
Monetary financial institutions	142,487	115,600
Non-monetary financial institutions	59,294	55,241
<i>Non-residents in euro</i>		
Monetary financial institutions	175,194	165,629
Non-monetary financial institutions	58,888	53,059
3. Total international business	472,009	415,460

Table A.19.2: All Credit Institutions: International Business: Analysis by Geographic Area

	Liabilities			Assets			Net external liabilities ^a
	Euro	Non-euro	Total	Euro	Non-euro	Total	
31 March 2011							
1. EU Countries	203,712	158,363	362,074	217,789	199,579	417,368	-41,984
MU Countries	131,039	60,878	191,916	172,433	58,822	231,256	-26,030
Austria	248	47	295	2,094	354	2,448	-2,153
Belgium	39,668	12,648	52,316	5,515	1,089	6,604	45,712
Luxembourg	1,317	656	1,973	3,028	930	3,959	-1,986
Finland	31	73	104	661	178	839	-735
France	21,304	3,751	25,055	21,831	2,898	24,728	326
Germany	43,141	4,774	47,915	47,888	1,799	49,687	-1,772
Greece	4	16	20	1,508	543	2,050	-2,030
Ireland	-	25,931	25,931	-	39,241	39,241	-
Italy	14,693	564	15,257	48,465	6,003	54,468	-39,211
Netherlands	6,388	12,147	18,536	11,589	2,684	14,273	4,262
Portugal	40	32	72	2,108	218	2,326	-2,254
Spain	3,185	55	3,240	26,221	2,651	28,872	-25,632
Other MU ^b	1,020	183	1,203	1,525	235	1,760	-557
Other EU	72,673	97,485	170,158	45,356	140,757	186,113	-15,955
Denmark	6,099	276	6,375	4,288	1,299	5,587	788
Sweden	54	402	456	884	1,851	2,735	-2,279
United Kingdom	66,480	96,738	163,217	37,501	133,622	171,123	-7,906
Other EU	41	69	110	2,683	3,985	6,668	-6,558
2. Other Europe	1,690	4,415	6,105	1,878	9,062	10,940	-4,835
Switzerland	1,520	4,004	5,524	552	5,588	6,141	-616
Other Europe	170	410	581	1,325	3,474	4,799	-4,219
3. Other Industrial Countries	10,010	18,775	28,785	11,635	58,097	69,732	-40,947
Australia, New Zealand, South Africa	84	369	454	1,285	2,480	3,765	-3,311
Canada	200	7,847	8,047	850	3,799	4,649	3,397
Japan	219	41	260	844	1,952	2,796	-2,536
United States	9,507	10,518	20,025	8,655	49,866	58,521	-38,496
4. Offshore Centres	2,818	13,134	15,952	628	6,070	6,697	9,255
5. Other	458	2,086	2,544	1,195	4,839	6,034	-3,490
Grand Total	218,689	196,772	415,460	233,125	277,647	510,772	-82,002

^a Net external liabilities are based on the selected assets and liabilities which are included in this table. A plus sign denotes net external liabilities; a minus sign net external assets.

^b Positions vis-a-vis Slovenia, Cyprus, Malta, Slovakia and Estonia are not statistically significant.

Table A.19.2 – continued

Liabilities			Assets			Net external liabilities ^a
Euro	Non-euro	Total	Euro	Non-euro	Total	
31 December 2010						
213,577	197,355	410,932	232,334	231,127	463,461	-37,719
136,899	73,463	210,362	180,493	70,218	250,711	-25,539
223	46	269	2,388	587	2,975	-2,706
39,431	11,829	51,261	4,995	846	5,842	45,419
1,683	540	2,223	3,880	994	4,875	-2,651
73	64	137	892	246	1,138	-1,001
19,351	5,340	24,692	21,206	2,635	23,841	851
54,863	6,084	60,947	60,603	4,200	64,803	-3,856
5	6	11	795	213	1,008	-997
-	36,146	36,146	-	50,955	50,955	-
11,430	1,384	12,814	42,991	4,364	47,355	-34,541
6,401	11,688	18,088	14,118	2,637	16,755	1,333
54	2	56	2,197	16	2,214	-2,158
2,290	53	2,343	24,469	2,114	26,583	-24,240
1,094	283	1,377	1,958	410	2,368	-991
76,678	123,892	200,570	51,841	160,909	212,750	-12,180
6,861	424	7,285	3,811	1,313	5,124	2,161
52	348	400	939	1,621	2,560	-2,161
69,704	123,014	192,718	44,028	154,064	198,092	-5,374
61	107	168	3,063	3,911	6,974	-6,806
2,257	4,368	6,625	2,137	9,815	11,953	-5,328
2,141	4,127	6,268	389	5,996	6,385	-117
116	241	357	1,749	3,819	5,568	-5,211
11,222	19,076	30,298	10,118	69,293	79,411	-49,113
112	431	543	1,215	4,323	5,538	-4,995
107	7,923	8,030	1,002	5,043	6,045	1,985
283	252	535	318	2,968	3,286	-2,751
10,719	10,470	21,190	7,583	56,958	64,542	-43,352
5,129	13,644	18,773	524	8,238	8,761	10,012
1,897	3,484	5,380	2,226	6,180	8,407	-3,026
234,082	237,927	472,009	247,340	324,653	571,992	-85,174

Table A.20.1: Money Market Funds – Monthly Aggregate Balance Sheet

	Assets							
	Total	Deposits and loan claims	Securities other than shares				Money market fund shares/units	Other assets including shares and other equities
			Issued by Irish residents	Issued by other euro area residents	Issued by non-euro area residents			
	MFI	Other						
Outstanding Amounts – € million								
2010								
May	341,710	40,235	4,384	83,350	171,387	40,565	754	1,035
June	346,978	37,090	4,833	84,232	172,017	47,306	720	779
July	339,239	47,933	3,427	80,667	166,806	38,744	1,063	599
August	360,555	47,877	3,750	91,772	175,067	40,659	917	512
September	347,053	42,779	3,901	89,365	166,696	42,921	719	672
October	352,556	40,174	3,683	93,091	173,873	40,324	723	687
November	368,829	43,847	3,276	97,255	182,488	40,464	733	766
December	359,015	47,749	3,410	92,513	173,938	40,262	730	415
2011								
January	359,684	41,792	2,899	91,286	182,268	39,951	732	755
February	360,229	46,597	2,618	93,242	178,843	37,765	762	400
March	347,723	44,060	2,431	91,830	167,104	40,570	786	941
April	350,458	69,140	2,374	84,552	156,938	36,082	892	480
May	362,704	107,508	1,894	73,536	141,897	36,505	960	406
Liabilities								
	Total	Money market fund shares/units Issued			Other Liabilities			
		Issued to Irish residents	Issued to other euro area residents	Issued to non-euro area residents				
Outstanding amounts – € million								
2010								
May	341,710	14,156	52,985	273,093	1,476			
June	346,978	11,543	54,939	278,743	1,753			
July	339,239	10,302	53,250	273,121	2,566			
August	360,555	10,889	54,994	291,168	3,504			
September	347,053	11,053	54,187	279,638	2,175			
October	352,556	10,428	48,965	290,662	2,501			
November	368,829	12,031	55,578	298,950	2,269			
December	359,015	12,229	52,963	292,270	1,554			
2011								
January	359,684	13,147	53,849	289,516	3,172			
February	360,229	15,248	54,137	287,154	3,690			
March	347,723	15,186	55,213	274,606	2,718			
April	350,458	15,719	57,225	271,813	5,701			
May	362,704	15,564	55,696	287,914	3,530			

Table A.20.2: Money Market Funds – Currency Breakdown of Assets

	Assets								
	Total	Loans				Securities other than shares			
						Issued by Irish residents			
		Euro	Sterling	USD	Other	Euro	Sterling	USD	Other
Outstanding Amounts – € million									
2009									
March	314,739	7,384	14,814	15,661	497	1,727	3,456	780	
June	316,808	5,834	10,602	13,009	557	1,323	2,663	683	1
September	308,528	4,607	8,394	14,903	460	1,005	2,412	899	
December	308,551	6,608	8,193	12,983	316	1,232	2,439	852	
2010									
March	322,280	7,825	6,385	20,786	306	1,458	1,980	987	3
June	345,479	8,795	9,923	17,999	373	2,199	1,945	669	20
September	345,662	11,789	9,808	20,853	330	1,861	1,239	798	3
December	357,873	10,774	12,080	24,566	330	1,007	1,674	652	78
2011									
March	345,996	11,651	11,482	20,573	355	1,384	489	486	72
Securities other than shares									
Issued by other euro area residents									
Issued by non-euro area residents									
Euro Sterling USD Other Euro Sterling USD Other									
2009									
March	35,020	13,639	13,568	165	13,976	76,679	115,985	1,388	
June	37,560	19,420	13,963	222	13,311	83,370	112,771	1,519	
September	43,812	17,536	12,903	308	14,170	84,170	101,383	1,569	
December	46,923	18,901	12,388	552	15,119	80,807	100,113	1,124	
2010									
March	50,509	19,647	12,775	562	16,166	84,072	97,543	1,275	
June	48,317	21,015	14,463	437	17,682	85,703	114,646	1,293	
September	49,810	23,858	15,248	449	14,772	85,043	108,590	1,212	
December	51,219	24,083	16,142	1,068	15,587	90,212	106,412	1,989	
2011									
March	50,068	22,544	18,792	427	14,603	88,462	103,847	761	

Section B

Interest Rates

Table B.1.1: Retail Interest Rates – Deposits, Outstanding Amounts

	Households				Non-financial corporations		
	Overnight	Redeemable at notice	With agreed maturity		Overnight	With agreed maturity	
			Up to 2 years	Over 2 years		Up to 2 years	Over 2 years
Rates (per cent per annum)							
2010							
May	0.60	2.23	2.88	1.99	0.20	2.03	0.72
June	0.66	2.23	2.86	1.91	0.20	1.98	0.73
July	0.64	2.25	2.88	1.67	0.29	2.01	0.77
August	0.61	2.15	2.86	1.81	0.20	2.01	0.85
September	0.63	2.17	2.82	1.83	0.18	2.05	0.86
October	0.62	2.18	2.82	1.85	0.20	2.14	0.93
November	0.59	2.17	2.80	1.77	0.19	2.12	2.80
December	0.62	2.17	2.80	1.75	0.19	2.26	2.61
2011							
January	0.63	2.17	2.79	1.72	0.21	2.30	2.51
February	0.63	2.17	2.77	1.79	0.21	2.29	1.38
March	0.64	2.18	2.74	1.80	0.22	2.31	1.37
April	0.70	2.29	2.76	1.82	0.23	2.47	1.19
May	0.68	2.29	2.80	2.06	0.24	2.61	1.30
Volumes (€ million)							
2010							
May	37,016	17,226	29,365	3,176	16,035	19,951	2,715
June	36,281	17,305	29,352	3,179	16,487	19,412	2,701
July	36,430	17,303	29,216	3,211	16,184	19,414	2,673
August	35,860	17,212	29,289	3,124	16,237	19,453	2,677
September	36,051	16,901	29,203	3,072	15,798	18,330	2,677
October	36,424	16,600	29,061	3,065	16,375	17,126	2,689
November	35,935	15,856	27,914	3,028	15,970	16,802	1,756
December	36,986	15,166	27,849	3,310	17,076	14,087	543
2011							
January	36,509	14,974	27,848	3,310	16,450	14,260	529
February	36,554	14,708	27,384	3,343	16,118	14,209	511
March	36,349	14,324	27,511	3,382	16,003	14,544	533
April	36,333	14,159	27,764	3,408	15,932	13,459	513
May	35,754	13,795	27,954	3,402	15,887	13,442	545

Notes: The interest rate and volume data refer to euro-denominated deposits and loans vis-à-vis households and non-financial corporations resident in Ireland and other Monetary Union Member States. Rates reported are weighted averages for each instrument category. Data are representative of resident offices of banks and building societies. Credit union data are not included in the interest rates tables.

Table B.1.2: Retail Interest Rates – Loans, Outstanding Amounts

	Households						
	Overdrafts	Loans for house purchases with original maturity			Consumer loans and other loans with original maturity		
		Up to 1 year	Over 1 and up to 5 years	Over 5 years	Up to 1 year	Over 1 and up to 5 years	Over 5 years
Rates (per cent per annum)							
2010							
May	12.90	2.84	2.75	2.88	7.22	6.18	4.18
June	12.20	2.99	2.78	2.76	8.10	5.73	4.03
July	12.52	3.01	2.79	2.77	8.13	5.77	4.06
August	12.08	3.09	2.88	2.85	8.10	5.81	4.12
September	12.72	3.10	2.89	2.85	8.41	5.84	4.19
October	12.83	3.20	2.92	2.85	8.85	5.91	4.23
November	12.83	3.27	2.94	2.85	9.04	5.48	4.11
December	13.10	3.28	3.11	2.90	9.06	5.44	4.18
2011							
January	13.24	3.30	3.11	2.90	9.20	6.00	4.31
February	13.12	3.26	2.98	2.98	9.08	5.93	4.09
March	13.13	3.32	3.06	3.01	9.12	5.93	4.11
April	13.29	3.47	3.22	3.14	9.38	6.02	4.27
May	13.08	3.54	3.27	3.18	9.33	6.03	4.31
Volumes (€ million)							
2010							
May	2,612	943	1,703	105,056	6,720	6,416	8,472
June	4,090	881	1,647	104,620	7,730	8,326	10,569
July	4,062	853	1,594	104,427	7,281	8,215	10,638
August	3,989	846	1,553	104,495	7,276	8,085	10,624
September	3,968	807	1,521	104,995	6,784	8,288	10,565
October	3,828	772	1,462	104,808	6,751	8,056	10,412
November	3,809	772	1,432	104,432	6,860	7,707	10,465
December	3,841	776	998	97,403	7,449	7,865	9,461
2011							
January	3,756	771	980	97,139	7,217	7,778	9,451
February	3,789	686	923	97,067	7,299	8,521	10,459
March	3,663	683	920	96,866	7,036	8,508	10,537
April	3,685	623	907	96,723	6,965	8,359	10,621
May	3,676	586	894	96,506	6,864	8,291	10,560

Notes: The interest rate and volume data refer to euro-denominated deposits and loans vis-à-vis households and non-financial corporations resident in Ireland and other Monetary Union Member States. Rates reported are weighted averages for each instrument category. Data are representative of resident offices of banks and building societies. Credit union data are not included in the interest rates tables.

Table B.1.2 – Continued

Non-financial corporations

Overdrafts	Loans with original maturity			
	Up to 1 year	Over 1 and up to 5 years	Over 5 years	
Rates (per cent per annum)				
2010				
5.81	2.98	3.20	2.88	May
5.27	3.13	3.06	2.85	June
5.63	3.21	3.03	2.90	July
5.54	3.22	3.13	2.94	August
5.42	3.25	3.19	2.96	September
5.62	3.34	3.28	3.08	October
5.01	3.32	3.30	3.13	November
5.34	3.47	3.31	3.20	December
2011				
5.16	3.52	3.33	3.20	January
5.31	3.60	3.36	3.27	February
4.91	3.64	3.34	3.29	March
5.06	3.73	3.54	3.44	April
5.14	3.77	3.55	3.47	May
Volumes (€ million)				
2010				
5,114	38,451	40,061	52,255	May
10,880	32,306	37,433	51,104	June
10,587	30,249	36,165	49,760	July
11,337	28,595	34,967	48,968	August
10,638	27,889	34,793	48,456	September
10,583	26,953	32,576	44,655	October
10,687	23,129	28,259	43,342	November
9,912	22,783	27,369	43,036	December
2011				
9,880	22,571	27,882	42,768	January
9,928	23,563	26,740	41,337	February
9,780	23,061	26,642	40,957	March
9,623	22,990	26,170	40,885	April
9,482	23,128	26,053	40,619	May

Table B.2.1: Retail Interest Rates and Volumes – Loans and Deposits, New Business

Loans							
Households							
For house purchases			For consumption purposes			For other purposes	
Floating rate and up to 1 year fixation	Over 1 year fixation	APRC	Floating rate and up to 1 year fixation	Over 1 year fixation	APRC		

Rates (per cent per annum)**2010**

May	2.75	3.83	3.14	5.30	9.76	6.34	3.86
June	2.83	3.89	3.10	4.23	10.28	5.13	3.76
July	2.81	3.82	3.08	6.14	10.50	7.23	3.53
August	3.07	4.05	3.36	5.79	10.67	6.73	3.98
September	2.96	4.13	3.28	5.10	10.58	5.89	4.35
October	2.94	4.09	3.19	6.00	9.77	6.77	4.78
November	2.95	4.10	3.24	6.06	10.46	6.84	4.79
December	3.01	4.17	3.28	4.76	10.04	5.23	3.87

2011

January	2.91	4.26	3.24	5.79	10.63	6.71	4.50
February	2.99	4.52	3.72	7.26	9.92	8.16	5.09
March	3.09	4.23	3.46	6.02	10.09	7.23	5.08
April	3.20	4.29	3.47	5.23	9.90	6.38	4.61
May	3.29	4.43	3.49	7.23	10.55	8.19	5.93

Volumes (€ million)**2010**

May	1,442	1,158	..	206	65	..	74
June	1,365	435	..	295	52	..	58
July	1,353	490	..	153	55	..	79
August	1,477	555	..	183	45	..	100
September	1,534	505	..	265	46	..	619
October	1,175	330	..	168	43	..	49
November	1,178	389	..	180	38	..	132
December	1,090	329	..	248	25	..	87

2011

January	1,047	322	..	182	44	..	54
February	1,009	898	..	143	62	..	53
March	1,190	568	..	134	60	..	49
April	1,092	331	..	156	51	..	77
May	1,086	211	..	104	42	..	38

Notes: The interest rate and volume data refer to euro-denominated deposits and loans vis-à-vis households and non-financial corporations resident in Ireland and other Monetary Union Member States. Rates reported are weighted averages for each instrument category. Data are representative of resident offices of banks and building societies. Credit union data are not included in the interest rates tables.

Table B.2.1 – Continued

Loans				Deposits		
Non-financial corporations				Households	Non-financial corporations	
Loans up to €1 million		Loans over €1 million		With agreed maturity	With agreed maturity	
Floating rate and up to 1 year fixation	Over 1 year fixation	Floating rate and up to 1 year fixation	Over 1 year fixation			
						Rates (per cent per annum)
						2010
3.75	4.60	2.87	2.57	1.51	1.09	May
3.71	4.10	2.80	3.16	1.45	1.04	June
3.73	4.44	2.69	2.56	1.55	1.27	July
3.82	4.67	2.69	2.93	1.60	1.25	August
4.05	4.69	2.90	3.07	1.61	1.20	September
4.05	4.93	3.24	2.69	1.65	1.26	October
4.49	5.14	3.20	3.46	1.75	1.25	November
3.87	4.71	3.12	2.79	1.84	1.40	December
						2011
4.24	5.41	3.24	2.83	1.81	1.42	January
4.32	5.38	3.09	2.63	1.97	1.41	February
4.27	5.86	3.51	2.30	1.93	1.41	March
4.74	6.17	3.22	2.27	1.81	1.52	April
4.75	6.90	2.96	4.29	1.98	1.72	May
						Volumes (€ million)
						2010
547	72	2,183	187	10,190	8,260	May
635	180	2,615	183	10,472	8,422	June
510	75	2,776	326	9,953	7,858	July
445	68	3,879	152	10,052	6,665	August
535	65	1,874	197	11,477	8,817	September
404	56	1,181	161	9,299	8,037	October
491	58	2,162	204	9,144	7,539	November
529	47	1,561	203	9,932	6,695	December
						2011
303	50	627	264	10,088	6,575	January
328	63	803	189	10,129	6,565	February
404	64	1,119	169	12,333	6,717	March
250	45	626	45	7,873	5,170	April
247	54	841	77	7,862	5,143	May

Table B.3: Official and Selected Interest Rates

Per cent per annum	Eurosystem Official Interest Rates			Interbank Market				Clearing Banks' Prime Rates
	Marginal lending facility	Deposit facility	Main refinancing operations	Eonia (overnight)	1 month Euribor	3 month Euribor	12 month Euribor	Ireland
End-month								
2010								
May	1.75	0.25	1.00	0.33	0.43	0.70	1.26	0.65 - 2.00
June	1.75	0.25	1.00	0.54	0.49	0.77	1.31	0.65 - 2.00
July	1.75	0.25	1.00	0.42	0.65	0.90	1.42	0.85 - 2.20
August	1.75	0.25	1.00	0.39	0.62	0.89	1.41	1.00 - 2.20
September	1.75	0.25	1.00	0.88	0.63	0.89	1.43	1.03 - 2.20
October	1.75	0.25	1.00	0.72	0.85	1.05	1.54	1.10 - 2.30
November	1.75	0.25	1.00	0.54	0.81	1.03	1.53	1.10 - 2.30
December	1.75	0.25	1.00	0.82	0.78	1.01	1.51	1.15 - 2.30
2011								
January	1.75	0.25	1.00	1.31	0.90	1.07	1.64	1.15 - 2.40
February	1.75	0.25	1.00	0.69	0.87	1.09	1.77	1.15 - 2.40
March	1.75	0.25	1.00	0.90	0.97	1.24	2.00	1.20 - 2.50
April	2.00	0.50	1.25	1.42	1.24	1.39	2.13	1.25 - 2.70
May	2.00	0.50	1.25	0.95	1.23	1.43	2.14	1.35 - 2.80

Note: Euribor is the rate at which euro interbank term deposits are offered by one prime bank to another, within the euro area. Daily data from 30 December 1998 are available from www.euribor.org.

Section C

Other Financial Data

Table C.1: Investment Funds – Aggregate Balance Sheet

		Total Assets							
		Deposits and loan claims			Securities other than shares				
		Domestic Total	OMUMs' Total	ROW Total	Domestic Total	OMUMs' Total	ROW Total		
Outstanding amounts – € million									
2009									
September	414,566	4,991	2,474	12,936	4,123	34,227	87,934		
December	458,630	4,613	2,534	13,193	4,596	34,855	109,592		
2010									
March	510,571	4,448	2,484	12,604	5,918	33,115	120,299		
June	553,748	4,836	2,760	18,363	5,619	34,120	144,596		
September	577,972	4,649	1,733	18,011	5,721	36,471	157,039		
December	645,556	4,178	1,771	19,464	5,871	37,934	190,426		
2011									
March	649,414	4,506	2,041	19,858	5,286	39,446	178,724		
Transactions – € million									
2009									
September	12,333	-687	611	-202	1,218	3,699	8,021		
December	15,831	-348	10	-650	77	-1,763	14,907		
2010									
March	25,062	-197	-41	-1,068	1,579	-2,806	6,528		
June	19,678	377	389	4,224	-513	654	11,017		
September	29,006	-131	-968	1,068	144	1,913	16,768		
December	35,137	-435	17	1,290	260	938	29,153		
2011									
March	18,479	414	273	1,146	-497	1,869	-5,796		
		Total Liabilities							
		Investment fund shares/units							
		Domestic MFIs	Domestic Non-MFI's	Domestic Total	OMUMs MFI	OMUMs' Non-MFI's	OMUMs' Total	ROW Total	Total
Outstanding amounts – € million									
2009									
September	414,566	5,043	19,065	24,108	28,289	106,934	135,223	237,393	396,724
December	458,630	5,796	21,908	27,703	32,221	121,797	154,018	259,419	441,141
2010									
March	510,571	7,132	26,961	34,093	33,933	128,271	162,204	288,097	484,395
June	553,748	9,637	36,430	46,067	34,536	130,552	165,088	309,438	520,593
September	577,972	9,122	34,482	43,603	36,418	137,666	174,084	322,055	539,743
December	645,556	10,367	39,188	49,555	41,103	155,375	196,478	359,435	605,468
2011									
March	649,414	9,595	36,270	45,865	41,783	157,944	199,726	362,331	607,923
Transactions – € million									
2009									
September	12,333	-475	-1,797	-2,272	1,480	5,594	7,074	9,141	13,943
December	15,831	325	1,227	1,551	2,382	9,005	11,387	5,158	18,096
2010									
March	25,062	598	2,262	2,860	-89	-338	-427	13,605	16,038
June	19,678	1,798	6,798	8,596	-315	-1,192	-1,507	7,687	14,776
September	29,006	-605	-2,288	-2,894	2,012	7,604	9,615	16,295	23,017
December	35,137	495	1,871	2,365	2,767	10,459	13,226	17,673	33,264
2011									
March	18,479	-665	-2,512	-3,177	1,447	5,469	6,916	11,444	15,184

* A reclassification from Non-Financial assets to Other Assets resulted in large transaction figures in Q4 2010.

Table C.1 – continued

Shares and other equity			Investment fund shares/units (incl. MMF shares)			Non-financial assets			Other assets
Domestic Total	OMUMs' Total	ROW Total	Domestic Total	OMUMs' Total	ROW Total	Domestic Total	OMUMs' Total	ROW Total	Total
9,915	31,883	152,107	25,247	4,138	17,478	6,881	311	8,134	11,789
9,018	33,188	168,351	25,863	4,557	20,094	8,290	270	7,744	11,870
10,390	35,532	186,836	29,445	4,950	20,395	16,242	524	14,934	12,455
11,109	30,508	192,061	31,628	5,005	23,218	17,286	510	17,185	14,944
9,627	34,523	198,468	31,457	5,472	20,963	17,621	843	13,936	21,439
12,175	38,097	230,145	33,092	6,909	21,556	11*	0*	135*	43793*
14,174	44,708	226,522	32,901	7,322	24,864	10	0	134	48,917
1,216	734	1,777	-1,056	717	-888	-2,161	22	2,421	-3,109
-1,181	-712	5,709	-941	351	1,261	661	-16	-648	-885
850	1,927	3,031	2,211	123	-865	7,011	271	6,451	59
431	-4,190	4,699	693	46	1,226	-1,422	-42	184	1,904
-1,082	1,846	2,812	2,567	437	-918	1,719	307	-2,153	4,677
2,787	2,331	8,215	-165	1,245	-805	-8299*	-526*	1475*	22470*
2,228	5,814	2,220	112	511	3,561	0	0	15	6,608
Loans and deposits received		Other liabilities							
Total		Total							
528	17,315								
2,581	14,908								
4,082	22,095								
5,440	27,715								
4,206	34,023								
3,899	36,190								
4,792	36,700								
-190	-1,421								
710	-2,975								
1,615	7,408								
1,040	3,861								
-993	6,982								
-365	2,238								
1,038	2,258								

Table C.2.1: Securities Issues Statistics: Debt Securities

€ Million	Debt securities: All currencies					
	Short-term securities					
	Total	MFIs	OFIs	IC&PF	NFCs	Govt
Outstanding amounts						
2009						
December	95,737	46,496	36,504	0	0	12,737
2010						
January	96,031	46,771	36,708	0	0	12,552
February	85,841	47,448	27,097	0	0	11,296
March	86,209	47,975	26,183	0	0	12,051
April	87,766	46,971	28,816	0	0	11,979
May	81,067	41,251	31,898	0	0	7,918
June	79,680	38,201	32,506	0	0	8,973
July	72,122	35,251	30,230	0	0	6,641
August	81,035	36,883	34,992	0	0	9,160
September	78,742	32,609	34,470	0	0	11,663
October	78,130	29,094	38,804	0	0	10,232
November	77,637	26,792	41,395	0	0	9,450
December	84,265	18,382	59,014	0	0	6,869
2011						
January	101,456	35,235	61,512	0	0	4,709
February	87,498	35,254	48,800	0	0	3,444
March	84,592	34,574	48,125	0	0	1,893
April	86,280	37,242	48,310	0	0	728
May	85,582	36,377	48,489	0	0	716
Transactions						
2009						
December						
2010						
January	294	275	204	0	0	-185
February	-10,201	665	-9,610	0	0	-1,256
March	369	528	-914	0	0	755
April	1,556	-1,004	2,632	0	0	-72
May	-6,698	-5,720	3,083	0	0	-4,061
June	-1,387	-3,050	608	0	0	1,055
July	-7,558	-2,950	-2,276	0	0	-2,332
August	8,913	1,633	4,762	0	0	2,518
September	-2,294	-4,275	-522	0	0	2,503
October	-612	-3,515	4,334	0	0	-1,431
November	-494	-2,302	2,591	0	0	-783
December	6,628	-8,410	17,619	0	0	-2,581
2011						
January	17,191	16,854	2,497	0	0	-2,160
February	-13,958	19	-12,712	0	0	-1,265
March	-2,907	-681	-675	0	0	-1,551
April	1,690	2,668	186	0	0	-1,164
May	-699	-865	178	0	0	-12

Table C.2.1 – continued

Debt securities: All currencies

Long-term securities

Total	MFI	OFI	IC&PF	NFCs	Govt
959,791	132,681	751,528	2,302	1,997	71,283
970,413	135,817	752,390	2,245	2,006	77,955
967,816	136,067	747,158	2,299	2,233	80,059
972,758	141,941	744,918	2,385	2,201	81,313
982,949	144,801	750,554	2,346	3,273	81,975
998,287	145,348	762,450	2,537	4,189	83,763
995,602	142,696	761,563	2,557	3,537	85,249
979,890	138,000	750,344	2,214	2,665	86,667
1,003,201	138,332	770,593	2,457	3,615	88,204
967,772	115,471	756,705	2,294	3,605	89,697
969,222	105,978	767,344	2,229	4,001	89,670
993,806	102,983	792,312	4,310	4,227	89,974
982,305	101,120	783,140	4,186	3,665	90,194
982,523	99,327	787,011	2,277	3,734	90,174
975,512	99,508	780,066	2,261	3,596	90,081
959,572	94,511	769,423	2,197	3,549	89,892
952,240	93,242	764,350	2,108	2,867	89,673
952,850	92,760	765,351	2,167	2,906	89,666
10,623	3,136	863	-57	9	6,672
-2,595	251	-5,232	55	227	2,104
4,942	5,874	-2,240	86	-32	1,254
10,190	2,860	5,636	-39	1,071	662
15,340	547	11,896	191	917	1,789
-2,684	-2,652	-887	21	-652	1,486
-15,715	-4,697	-11,219	-344	-872	1,417
23,312	332	20,249	243	950	1,538
-35,428	-22,861	-13,888	-163	-9	1,493
1,449	-9,493	10,639	-66	396	-27
24,583	-2,995	24,967	2,081	225	305
-11,500	-1,863	-9,172	-124	-561	220
218	-1,792	3,872	-1,909	68	-21
-7,010	181	-6,945	-17	-137	-92
-15,940	-4,997	-10,643	-64	-47	-189
-7,334	-1,269	-5,074	-89	-683	-219
611	-482	1,001	59	40	-7

Table C.2.1 – continued

€ Million	Debt securities: Euro denominated					
	Short-term securities					
	Total	MFIs	OFIs	IC&PF	NFCs	Govt
Outstanding amounts						
2009						
December	62,915	24,071	29,574	0	0	9,270
2010						
January	62,826	23,782	29,774	0	0	9,270
February	52,015	24,285	20,133	0	0	7,597
March	54,167	25,420	20,224	0	0	8,523
April	57,512	26,122	22,756	0	0	8,634
May	56,046	24,950	25,751	0	0	5,345
June	55,074	21,605	26,786	0	0	6,683
July	50,169	20,151	24,884	0	0	5,134
August	58,285	20,963	29,746	0	0	7,576
September	58,868	19,436	29,284	0	0	10,148
October	59,038	16,417	33,494	0	0	9,127
November	60,702	16,157	36,354	0	0	8,191
December	70,967	11,198	53,607	0	0	6,162
2011						
January	87,985	27,434	56,289	0	0	4,262
February	75,807	28,332	44,366	0	0	3,109
March	72,493	27,445	43,485	0	0	1,563
April	74,443	30,315	43,623	0	0	505
May	74,484	30,263	43,926	0	0	295
Transactions						
2009						
December						
2010						
January	-89	-289	200	0	0	0
February	-10,822	491	-9,640	0	0	-1,673
March	2,151	1,135	90	0	0	926
April	3,344	702	2,532	0	0	110
May	-1,465	-1,171	2,995	0	0	-3,289
June	-973	-3,346	1,035	0	0	1,338
July	-4,903	-1,453	-1,901	0	0	-1,549
August	8,115	812	4,861	0	0	2,442
September	583	-1,527	-462	0	0	2,572
October	-612	-3,515	4,334	0	0	-1,431
November	1,664	-261	2,860	0	0	-935
December	10,265	-4,959	17,253	0	0	-2,029
2011						
January	17,019	16,236	2,683	0	0	-1,900
February	-12,179	898	-11,923	0	0	-1,154
March	-3,313	-886	-881	0	0	-1,546
April	1,949	2,869	138	0	0	-1,058
May	40	-52	302	0	0	-210

Table C.2.1 – continued

Debt securities: Euro denominated

Long-term securities

Total	MFI	OFI	IC&PF	NFCs	Govt
718,359	98,355	547,409	120	1,617	70,858
727,609	100,469	548,008	0	1,617	77,515
723,770	100,292	542,013	0	1,857	79,608
730,971	105,637	542,714	0	1,757	80,863
734,414	109,444	540,552	0	2,899	81,519
734,169	108,778	539,264	0	2,859	83,268
728,284	106,381	534,964	0	2,192	84,747
733,211	104,508	540,025	0	2,100	86,578
751,680	106,360	554,891	0	2,318	88,111
730,361	88,980	549,454	0	2,318	89,609
724,716	80,992	551,825	0	2,318	89,581
729,823	76,902	560,461	160	2,418	89,882
723,491	76,548	554,695	160	1,986	90,102
714,446	75,906	546,369	0	2,086	90,085
709,418	76,973	540,492	0	1,960	89,993
701,465	73,083	536,615	0	1,960	89,807
706,745	72,596	543,203	0	1,356	89,590
703,412	72,055	540,420	0	1,356	89,581
9,249	2,113	599	-120	0	6,657
-3,840	-177	-5,995	0	239	2,093
7,201	5,345	701	0	-100	1,255
3,443	3,807	-2,162	0	1,143	655
-246	-666	-1,289	0	-40	1,749
-5,884	-2,396	-4,299	0	-668	1,479
4,928	-1,873	5,061	0	-91	1,831
18,468	1,852	14,866	0	217	1,533
-21,318	-17,380	-5,437	0	0	1,499
1,449	-9,493	10,639	-66	396	-27
5,108	-4,090	8,636	160	100	302
-6,332	-354	-5,766	0	-432	220
-9,046	-642	-8,326	-160	100	-18
-5,027	1,068	-5,877	0	-126	-92
-7,954	-3,890	-3,878	0	0	-186
5,280	-488	6,588	0	-603	-217
-3,333	-541	-2,783	0	0	-9

Table C.2.2: Securities Issues Statistics: Equities

€ Million	Equity Securities					
	Quoted securities					
	Total	MFIs	OFIs	IC&PF	NFCs	Govt
Outstanding amounts						
2009						
December	157,540	9,683	3,775	230	143,852	..
2010						
January	162,052	10,079	3,692	201	148,080	..
February	135,316	9,813	3,948	201	121,354	..
March	138,426	9,738	4,151	243	124,294	..
April	144,545	10,023	4,662	260	129,600	..
May	137,754	10,906	4,987	212	121,649	..
June	139,423	11,345	4,819	222	123,037	..
July	141,699	12,358	9,301	226	119,814	..
August	141,843	12,304	9,010	230	120,299	..
September	147,066	10,915	9,529	215	126,407	..
October	159,862	10,269	9,317	204	140,072	..
November	164,832	9,112	10,081	193	145,446	..
December	173,264	9,389	10,409	206	153,260	..
2011						
January	174,457	9,125	10,832	220	154,280	..
February	176,577	9,414	11,047	253	155,863	..
March	174,843	8,567	11,088	241	154,947	..
April	180,849	11,370	10,704	241	158,534	..
May	181,285	10,020	10,399	243	160,623	..
Transactions						
2009						
December						
2010						
January	2	0	0	0	2	..
February	940	0	-17	0	957	..
March	135	0	0	0	135	..
April	129	0	0	0	129	..
May	1,949	1,725	57	0	167	..
June	1,082	910	0	0	172	..
July	6	0	0	0	6	..
August	0	0	0	0	0	..
September	189	182	0	0	7	..
October	8	0	0	0	8	..
November	105	0	0	0	105	..
December	-430	0	-299	0	-131	..
2011						
January	104	190	0	0	-86	..
February	-101	0	0	0	-101	..
March	-154	0	-225	0	71	..
April	2,885	2,394	1	0	490	..
May	-544	0	0	0	-544	..

Table C.2.2 – continued

Equity Securities

Unquoted securities

Total	MFI	OFI	IC&PF	NFC	Govt
477	0	14	0	463	..
504	0	14	0	490	..
463	0	14	0	449	..
463	0	14	0	449	..
463	0	14	0	449	..
463	0	14	0	449	..
463	0	14	0	449	..
463	0	14	0	449	..
490	0	14	0	476	..
490	0	14	0	476	..
490	0	14	0	476	..
490	0	14	0	476	..
490	0	14	0	476	..
509	0	14	0	495	..
515	0	14	0	501	..
508	0	14	0	494	..
507	0	14	0	493	..
506	0	14	0	492	..
0	0	0	0	0	..
0	0	0	0	0	..
0	0	0	0	0	..
0	0	0	0	0	..
0	0	0	0	0	..
0	0	0	0	0	..
0	0	0	0	0	..
0	0	0	0	0	..
0	0	0	0	0	..
0	0	0	0	0	..
0	0	0	0	0	..
9	0	0	0	9	..
0	0	0	0	0	..
0	0	0	0	0	..
0	0	0	0	0	..
0	0	0	0	0	..

Section D

Quarterly Financial Accounts

Table D.1: Financial Balance Sheet By Sector, Q4 2010

	Total Assets	Total Liabilities	Net Financial Wealth	Total Assets Transactions	Total Liabilities Transactions	Net Financial Borrowing/Lending
€ million						
Non-financial corporations	614,117	834,073	-219,956	2,483	6,722	-4,239
Financial corporations	3,415,930	3,467,426	-51,497	-67,125	-77,416	10,291
Monetary financial institutions	1,699,336	1,729,047	-29,711	-108,087	-102,755	-5,332
Other financial intermediaries and financial auxiliaries	1,432,108	1,448,493	-16,385	42,438	27,599	14,839
Insurance corporations and pension funds	284,486	289,886	-5,400	-1,476	-2,259	783
General government	71,251	149,950	-78,699	-6,778	6,200	-12,978
Households and non-profit institutions serving households	293,621	194,443	99,178	75	-2,024	2,099
Rest of the world	2,972,002	2,719,994	252,008	-92,905	-97,732	4,827

Table D.1.1: Financial Balance Sheet By Sector, Q4 2010

	Total Assets								
		Gold & SDRs	Currency & Deposits			Securities other than shares			
				Currency & Transferrable Deposits	Other Deposits		Short-term securities	Long-term securities	Financial Derivatives
€ million									
Non-financial corporations	614,117	0	37,192	20,728	16,464	3,942	442	2,715	786
Financial corporations	3,415,930	1,034	700,876	72,043	628,833	1,050,212	336,694	669,520	43,998
Monetary financial institutions	1,699,336	1,034	622,519	49,572	572,947	626,380	293,837	301,281	31,262
Other financial intermediaries and financial auxiliaries	1,432,108	0	56,250	19,830	36,420	356,295	38,463	306,690	11,142
Insurance corporations and pension funds	284,486	0	22,106	2,641	19,465	67,537	4,394	61,549	1,594
General government	71,251	0	21,591	0	21,591	10,661	49	10,015	598
Households and non-profit institutions serving households	293,621	0	124,133	58,623	65,510	494	0	214	280
Rest of the world	2,972,002	0	529,884	64,406	465,478	519,861	35,460	449,627	34,774
	Total Liabilities								
			Currency & Deposits			Securities other than shares			
				Currency & Transferrable Deposits	Other Deposits		Short-term securities	Long-term securities	Financial Derivatives
€ million									
Non-financial corporations	834,073	0	0	0	0	4,238	0	3,665	573
Financial corporations	3,467,426	0	1,086,484	146,478	940,006	569,600	58,580	465,704	45,315
Monetary financial institutions	1,729,047	0	1,086,484	146,478	940,006	170,312	24,528	110,026	35,758
Other financial intermediaries and financial auxiliaries	1,448,493	0	0	0	0	395,102	34,052	351,493	9,557
Insurance corporations and pension funds	289,886	0	0	0	0	4,186	0	4,186	0
General government	149,950	0	13,857	673	13,184	88,105	11,187	76,881	37
Households and non-profit institutions serving households	194,443	0	0	0	0	0	0	0	0
Rest of the world	2,719,994	0	313,336	68,649	244,686	923,228	302,877	585,841	34,511

Table D.1.1 – continued

Total Assets

Loans			Shares and other equity				Insurance technical reserves				Other accounts receivable/payable		
	Short-term loans	Long-term loans		Quoted shares	Unquoted shares and other equity	Mutual fund shares		Net equity of households in life insurance reserves	Net equity of households in pension fund reserves	Prepayment of insurance premiums and reserves for outstanding claims			
	211,280	67,802	143,478	251,000	14,077	234,233	2,690	3,645	0	0	3,645	107,057	Non-financial corporations
	989,257	192,014	797,243	577,679	409,688	39,239	128,751	44,610	0	0	44,610	52,262	Financial corporations
	421,397	62,988	358,409	20,337	10,970	6,000	3,367	0	0	0	0	7,669	Monetary financial institutions
	562,902	127,003	435,899	428,025	336,083	33,239	58,702	0	0	0	0	28,636	Other financial intermediaries and financial auxiliaries
	4,958	2,024	2,934	129,317	62,635	0	66,682	44,610	0	0	44,610	15,958	Insurance corporations and pension funds
	8,208	0	8,208	22,507	8,793	10,716	2,998	0	0	0	0	8,284	General government
	0	0	0	45,821	8,640	37,181	0	120,983	47,425	71,138	2,420	2,190	Households and non-profit institutions serving households
	378,301	158,534	219,768	1,337,844	83,490	335,912	918,442	120,064	77,133	0	42,930	86,049	Rest of the world

€ million

Total Liabilities

Loans			Shares and other equity				Insurance technical reserves				Other accounts receivable/payable		
	Short-term loans	Long-term loans		Quoted shares	Unquoted shares and other equity	Mutual fund shares		Net equity of households in life insurance reserves	Net equity of households in pension fund reserves	Prepayment of insurance premiums and reserves for outstanding claims			
	286,351	77,127	209,224	418,323	n.a.	n.a.	0	0	0	0	0	125,161	Non-financial corporations
	346,189	189,153	157,036	1,156,266	13,004	180,935	962,327	247,768	124,558	71,138	52,071	61,120	Financial corporations
	0	0	0	457,709	2,389	97,095	358,225	0	0	0	0	14,543	Monetary financial institutions
	341,345	188,213	153,132	674,443	10,409	59,932	604,102	0	0	0	0	37,603	Other financial intermediaries and financial auxiliaries
	4,844	940	3,904	24,114	206	23,908	0	247,768	124,558	71,138	52,071	8,975	Insurance corporations and pension funds
	39,610	776	38,834	1,622	0	1,622	0	0	0	0	0	6,756	General government
	185,615	9,233	176,382	0	0	0	0	0	0	0	0	8,828	Households and non-profit institutions serving households
	729,281	142,061	587,220	658,639	364,423	203,661	90,555	41,533	0	0	41,533	53,978	Rest of the world

€ million

n.a. not available.

Table D.1.2: Financial Transactions By Sector, Q4 2010

	Total Assets Transactions								
		Gold & SDRs	Currency & Deposits			Securities other than shares			
				Currency & Transferrable Deposits	Other Deposits		Short-term securities	Long-term securities	Financial Derivatives
€ million									
Non-financial corporations	2,483	0	-13,537	1,401	-14,938	-340	-284	1	-57
Financial corporations	-67,125	0	-5,400	2,932	-8,332	-68,007	-32,383	-32,645	-2,980
Monetary financial institutions	-108,087	0	-6,171	4,243	-10,414	-96,766	-39,471	-57,354	59
Other financial intermediaries and financial auxiliaries	42,438	0	1,833	-948	2,781	29,838	7,241	24,993	-2,396
Insurance corporations and pension funds	-1,476	0	-1,062	-363	-699	-1,080	-153	-283	-643
General government	-6,778	0	-8,590	0	-8,590	3,595	0	3,622	-27
Households and non-profit institutions serving households	75	0	-672	1,133	-1,805	-3	0	-3	0
Rest of the world	-92,905	0	-105,820	6,359	-112,179	-27,009	-12,675	-7,368	-6,966
	Total Liabilities Transactions								
	Gold & SDRs	Currency & Deposits			Securities other than shares				
			Currency & Transferrable Deposits	Other Deposits		Short-term securities	Long-term securities	Financial Derivatives	
€ million									
Non-financial corporations	6,722	0	0	0	0	284	0	60	224
Financial corporations	-77,416	0	-94,321	6,211	-100,532	-23,014	-8,893	-7,075	-7,045
Monetary financial institutions	-102,755	0	-94,321	6,211	-100,532	-21,506	-8,500	-7,206	-5,800
Other financial intermediaries and financial auxiliaries	27,599	0	0	0	0	-1,508	-393	131	-1,245
Insurance corporations and pension funds	-2,259	0	0	0	0	0	0	0	0
General government	6,200	0	861	9	852	-5,151	-4,103	-1,024	-24
Households and non-profit institutions serving households	-2,024	0	0	0	0	0	0	0	0
Rest of the world	-97,732	0	-40,559	5,605	-46,164	-63,883	-32,346	-28,353	-3,185

Table D.1.2 – continued

Total Assets Transactions

Loans			Shares and other equity				Insurance technical reserves				Other accounts receivable/payable		
	Short-term loans	Long-term loans		Quoted shares	Unquoted shares and other equity	Mutual fund shares		Net equity of households in life insurance reserves	Net equity of households in pension fund reserves	Prepayment of insurance premiums and reserves for outstanding claims			
	8,176	1,998	6,178	1,605	138	1,210	258	-9	0	0	-9	6,588	Non-financial corporations
	-8,772	-6,614	-2,158	17,514	17,138	1,495	-1,119	-2,357	0	0	-2,357	-102	Financial corporations
	-4,077	836	-4,913	-195	-153	0	-42	0	0	0	0	-878	Monetary financial institutions
	-5,340	-7,364	2,024	14,693	15,118	1,495	-1,920	0	0	0	0	1,413	Other financial intermediaries and financial auxiliaries
	645	-86	730	3,016	2,173	0	843	-2,357	0	0	-2,357	-637	Insurance corporations and pension funds
	-69	0	-69	-2,128	-1,426	-9	-694	0	0	0	0	415	General government
	0	0	0	53	-77	130	0	800	475	113	212	-103	Households and non-profit institutions serving households
	9,911	5,000	4,911	37,823	-3,671	-2,852	44,345	-486	-692	0	206	-7,324	Rest of the world

€ million

Total Liabilities Transactions

Loans			Shares and other equity				Insurance technical reserves				Other accounts receivable/payable		
	Short-term loans	Long-term loans		Quoted shares	Unquoted shares and other equity	Mutual fund shares		Net equity of households in life insurance reserves	Net equity of households in pension fund reserves	Prepayment of insurance premiums and reserves for outstanding claims			
	5,687	-1,218	6,905	-7,880	n.a.	n.a.	0	0	0	0	0	8,631	Non-financial corporations
	9,239	6,695	2,543	48,566	-299	5,386	43,479	590	-217	113	694	-18,475	Financial corporations
	0	0	0	11,531	0	-214	11,745	0	0	0	0	1,542	Monetary financial institutions
	9,224	6,855	2,369	36,940	-299	5,505	31,734	0	0	0	0	-17,057	Other financial intermediaries and financial auxiliaries
	15	-160	175	95	0	95	0	590	-217	113	694	-2,959	Insurance corporations and pension funds
	10,356	420	9,937	6	0	6	0	0	0	0	0	127	General government
	-1,814	307	-2,122	0	0	0	0	0	0	0	0	-210	Households and non-profit institutions serving households
	-14,222	-5,820	-8,402	14,174	12,419	2,445	-689	-2,643	0	0	-2,643	9,402	Rest of the world

€ million

n.a. not available.

Section E

Public Finances and Competitiveness Indicators

Table E.1: Government Debt^a

€ million	2010			2011
	30 Jun.	30 Sep.	31 Dec.	31 Mar.
Government Debt				
Amount outstanding (gross)				
Euro-denominated debt				
Government stock	84,747	89,609	90,102	89,807
Exchequer Bills/Notes, Central Treasury Notes	4,944	6,333	6,133	1,655
Saving Certificates/Stamps, National Solidarity Bonds	3,599	3,952	4,300	4,550
Prize Bonds	1,203	1,272	1,330	1,392
Savings Bonds	3,517	3,885	4,240	4,540
National Instalment Savings	464	473	468	468
Ways and means	2,160	2,130	1,526	1,944
Borrowings from Central Bank, etc.	-	-	-	-
Local loans funds	5	5	5	5
Short-term paper	2,020	3,481	298	234
FX contracts	973	1,332	545	1,479
EIB loans	-	-	-	-
Public bond issues	-	-	-	-
Private placements	447	602	602	602
IMF ^b	-	-	-	2,091
EFSM	-	-	-	8,400
EFSF	-	-	-	3,617
Medium-term notes	-	-	-	-
Swaps	448	66	66	2,388
Total euro-denominated debt	104,529	113,141	109,614	123,171
Non-euro-denominated debt				
EIB loans	-	-	-	-
Public bond issues	-	-	-	-
Private placements	-	-	-	-
Medium-term notes	499	88	92	85
IMF ^b	-	-	-	3,499
EFSM	-	-	-	-
EFSF	-	-	-	-
Swaps	-499	-88	-92	-2,357
Short-term paper	1,018	1,258	529	292
FX contracts	-1,023	-1,264	-534	-1,432
Total non-euro-denominated debt	-5	-6	-4	87
Gross debt	104,524	113,135	109,610	123,258
Residual Maturity Profile				
Amounts due to mature in:				
- ≤ 1 year	9,970	7,895	14,121	9,846
- Over 1 year but ≤ 5 years	31,727	37,933	43,251	53,603
- Over 5 years but ≤ 10 years	36,442	38,656	43,352	50,925
- Over 10 years	26,385	28,651	8,886	8,886
Total	104,524	113,135	109,610	123,260

^a The term Government debt refers to central government debt. An advance release calendar for central government debt is shown on the IMF Special Data Dissemination Standards (SDDS) Bulletin Board.

^b The IMF liability is denominated in SDRs. The underlying currency weighting in the SDR basket is Euro: 37.4 per cent, Non-euro: 62.6 per cent.

Source: NTMA.

Table E.2: Irish Government Long-Term Bonds – Nominal Holdings

€ million End-quarter	2010			2011
	30 Jun.	30 Sep.	31 Dec.	31 Mar.
1. Resident ^a	12,583	14,263	15,991	14,916
- MFIs and Central Bank	9,778	11,019	12,697	12,345
- General government	416	741	842	539
- Financial intermediaries	2,135	2,216	2,169	1,781
i) Financial auxiliaries	285	310	315	315
ii) Insurance corporations and pension funds	1,789	1,843	1,774	1,335
iii) Other financial intermediaries	61	63	80	132
- Non-financial corporations	32	38	31	32
- Households	222	249	252	219
2. Rest of world	72,164	75,346	74,111	74,891
Total	84,747	89,609	90,102	89,807
3. Amounts due to mature in:				
- Less than 3 years	16,012	16,002	16,409	28,065
- 3 or more years but less than 5 years	10,837	11,864	11,889	7
- 5 or more years but less than 10 years	43,861	45,751	53,520	53,451
- 10 or more years but less than 15 years	14,037	15,992	8,284	8,284
- 15 or more years	0	0	0	0
Total	84,747	89,609	90,102	89,807

^a Above conform to ESA95 standard. Financial auxiliaries include, for example, insurance and security brokers and investment advisors, etc. Other financial intermediaries include mutual funds, financial leasing, etc.

Table E.3: Harmonised Competitiveness Indicators for Ireland (HCIs)

1999 Q1 = 100	Nominal HCI (Monthly average)	Real HCI (Deflated by consumer prices)	Real HCI (Deflated by producer prices)
2005			
January	106.56	117.74	106.97
February	105.91	116.89	106.82
March	106.51	117.24	107.23
April	105.67	116.59	106.78
May	104.88	115.77	107.02
June	102.82	113.64	104.32
July	103.12	114.00	105.52
August	103.66	114.53	105.81
September	103.34	114.44	105.28
October	102.93	113.99	105.45
November	102.26	113.10	105.01
December	102.34	112.80	105.02
2006			
January	102.95	113.56	104.51
February	102.33	113.29	104.94
March	102.85	113.84	104.97
April	103.70	114.73	105.83
May	104.71	116.03	107.33
June	104.88	116.11	107.23
July	104.99	116.31	106.69
August	104.99	116.64	107.37
September	104.77	116.18	108.08
October	104.36	115.89	105.68
November	104.99	116.33	105.64
December	105.80	117.48	106.79
2007			
January	105.06	116.83	106.77
February	105.37	117.20	105.66
March	106.10	118.14	105.63
April	106.76	118.86	106.76
May	106.73	118.80	107.23
June	106.31	118.31	107.69
July	106.89	119.00	107.88
August	106.75	118.97	108.87
September	107.65	119.89	108.41
October	108.46	120.61	109.82
November	109.84	122.03	109.94
December	109.94	122.04	111.53
2008			
January	110.76	122.67	110.67
February	110.72	122.94	111.60
March	113.19	126.08	113.57
April	114.35	126.93	116.19
May	113.85	126.21	114.98
June	113.89	126.06	114.45
July	114.36	125.82	114.20
August	112.50	123.64	114.86
September	111.30	122.39	111.56
October	108.69	119.60	110.10
November	108.28	119.53	109.44
December	112.32	123.94	111.54
2009			
January	112.02	123.31	111.01
February	110.45	120.79	110.31
March	112.46	122.85	111.96
April	111.84	121.98	111.52
May	112.31	121.71	111.77
June	112.74	121.79	111.90
July	112.89	121.30	113.70
August	113.18	121.32	111.81
September	114.45	122.13	113.91
October	115.44	122.79	114.19
November	115.25	122.23	113.13
December	114.40	120.74	112.19
2010			
January	112.80	118.67	110.44
February	110.87	116.07	109.60
March	110.75	115.46	108.28
April	109.46	113.87	108.04
May	106.66	110.99	106.04
June	104.82	108.85	103.10
July	106.51	110.79	104.91
August	106.30	110.33	104.84
September	106.91	110.54	105.82
October	109.90	113.44	107.39
November	108.70	111.69	106.98
December	107.08	110.05	104.22
2011			
January	107.21	110.04	103.97
February	108.08	110.89	104.67
March	109.50	112.18	105.82
April	110.99	113.44	107.62
May	110.41	112.69	106.81

Notes:

1. See article entitled "Measuring Ireland's Price and Labour Cost Competitiveness" in the Bank's Quarterly Bulletin No. 1 of 2010.
2. A rise in an indicator implies a disimprovement in competitiveness, while a fall in an indicator implies an improvement.
3. These indicators are available from January 1995 in excel format on the Bank's website.
4. Real HCIs may be subject to revisions to reflect latest available price data.

Table E.3: Harmonised Competitiveness Indicators for Ireland (HCIs) – continued

1999 Q1=100	Real HCI (Deflated by GDP)	Real HCI (Deflated by whole economy Unit Labour Costs)
1995		
Q1	93.61	105.92
Q2	92.85	105.16
Q3	93.21	105.64
Q4	93.33	104.99
1996		
Q1	93.63	105.16
Q2	94.33	106.10
Q3	95.84	106.72
Q4	98.15	107.84
1997		
Q1	99.58	108.06
Q2	98.26	104.49
Q3	97.25	107.63
Q4	100.79	106.41
1998		
Q1	96.39	100.01
Q2	99.27	101.30
Q3	100.71	101.60
Q4	102.12	106.06
1999		
Q1	100.00	100.00
Q2	97.08	100.13
Q3	99.05	96.51
Q4	98.06	94.89
2000		
Q1	97.05	94.05
Q2	95.47	91.40
Q3	95.61	91.43
Q4	94.48	90.52
2001		
Q1	98.73	93.14
Q2	98.02	92.71
Q3	100.36	95.13
Q4	100.52	95.25
2002		
Q1	101.48	92.20
Q2	101.38	94.17
Q3	105.50	95.35
Q4	107.26	96.43
2003		
Q1	110.94	101.55
Q2	113.63	104.12
Q3	113.78	105.17
Q4	114.69	104.14
2004		
Q1	116.20	108.10
Q2	114.72	108.20
Q3	115.08	109.88
Q4	116.54	111.15
2005		
Q1	117.39	112.62
Q2	116.79	111.82
Q3	115.06	114.04
Q4	113.72	113.44
2006		
Q1	116.84	113.97
Q2	117.07	116.24
Q3	119.44	115.16
Q4	116.74	117.26
2007		
Q1	118.62	114.57
Q2	119.90	118.86
Q3	117.28	123.96
Q4	118.52	123.77
2008		
Q1	119.67	130.37
Q2	120.84	132.32
Q3	119.42	127.33
Q4	116.42	125.68
2009		
Q1	113.97	124.68
Q2	114.89	122.54
Q3	114.49	124.00
Q4	112.41	127.34
2010		
Q1	109.70	117.89
Q2	106.77	114.76
Q3	106.08	110.75
Q4	107.47	113.83

Table E.4: Indices of Relative Wage Costs in Manufacturing Industry

1999=100	Average Hourly Earnings ^a		Unit Wage Costs ^a	
	Ireland	Major Trading Partners	Ireland ^c	Major Trading Partners
Year				
1990	69	71	166	90
1991	73	75	171	94
1992	76	79	163	97
1993	81	83	164	99
1994	82	86	155	98
1995	84	88	136	99
1996	87	92	135	100
1997	90	94	124	100
1998	95	97	110	101
1999	100	100	100	100
2000	106	105	97	99
2001	117	108	95	101
2002	125	112	88	101
2003	131	116	85	100
2004	137	119	85	98
2005	142	123	84	97
2006	149	126	85	97
2007	155	130	85	96
2008	163	135	86	101
2009	171	138	81	110
2010	171	140	71	104
2011 ^f	173	142	69	104
2012 ^f	175	146	70	105

1999=100	Relative Hourly Earnings ^b		Relative Unit Wage Costs ^b	
	National Currencies	Common Currency (€)	National Currencies	Common Currency (€)
Year				
1990	97	110	185	209
1991	97	107	181	201
1992	96	109	169	192
1993	98	103	165	174
1994	96	101	157	166
1995	95	101	137	146
1996	95	104	135	147
1997	95	104	124	136
1998	97	101	109	113
1999	100	100	100	100
2000	101	95	98	91
2001	108	102	94	88
2002	112	108	87	84
2003	113	117	85	87
2004	115	121	86	91
2005	116	122	86	91
2006	118	125	88	93
2007	119	130	88	95
2008	121	138	85	97
2009	123	142	74	86
2010	122	136	68	76
2011 ^f	121	138	67	76
2012 ^f	120	137	67	76

a In national currencies.

b A rise in the index implies a disimprovement in competitiveness, while a fall in the index implies an improvement.

c Changes in domestic unit wage costs should be interpreted with caution because of the strong influence of the chemicals sector in recent years.

Sources: Ireland – Central Statistics Office and Central Bank estimates.

Major trading partners comprise the United Kingdom, the United States, Germany, France, Italy, Belgium, the Netherlands, Spain and Singapore. Data on these were derived from the OECD and other sources.

T +353 1 224 6278 **F** +353 1 671 6561 www.centralbank.ie publications@centralbank.ie



Banc Ceannais na hÉireann
Central Bank of Ireland

Eurosystem

Bosca OP 559, Sráid an Dáma, Baile Átha Cliath 2, Éire
PO Box 559, Dame Street, Dublin 2, Ireland